# Screen Name Service: Implementation Guide

**Last Updated: September 16, 2002**

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# Introduction

Screen Name Service (SNS) is a free AOL service that provides single sign-on and profile-synchronization capabilities to any user who has an AOL Screen Name. SNS is a solution to the registration and sign-in complexities faced by many users today: remembering multiple user IDs and passwords for different sites, re-entering the same profile data at multiple sites, having different profile data on different sites, and so on.

For users, SNS provides these benefits:

- After signing in to SNS, users can sign in to any partner site with the same screen name.
- Users only need to enter profile information once at the SNS site. To register at a partner site, users simply authorize the service to transfer their SNS profile information to the partner site.
- An automatic profile-synchronization capability lets users keep their profile information synchronized across all partner sites and propagate profile changes across all sites.

Any user who has a Screen Name can participate in SNS, including users who obtained Screen Names from AOL, CompuServe, Netscape, or AOL Instant Messenger, or from the SNS site itself.

As a SNS partner, your site can take advantage of the pool of 100 million Screen Names that are currently in use across the various AOL brands. Your site can draw from that pool to increase membership for your personalized services and can generate greater repeat usage among members.

SNS is easy to implement at your site. All interaction with the SNS site - for user sign-in, registration, profile synchronization, and sign-out - takes place through standard HTTP or HTTPS requests, with data being exchanged as posted form data. To implement SNS, all you have to do is create handlers that generate or receive the HTTP or HTTPS requests and posted form data, as described in the Technical Overview.

You do not need to install any software or code libraries to offer the service on your site. In many cases, you can simply adapt your existing registration system to provide the functionality required to support SNS, especially if your site uses a dynamic page-generation engine such as ASP, JSP, or PHP.

This implementation guide provides a technical overview of how the service works and a summary of planning issues to consider before implementing the service.

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# Chapter 1: Technical Overview

**Note: Level S authorization is unsupported until Fall 2002. Disregard any documentation references to Level S.**

The Screen Name Service (SNS) is an AOL Inc. program that enables anyone with a screen name (SN) in the AOL namespace (i.e. any AOL, CompuServe 2000, AOL Instant Messenger (AIM), or other AOL Inc. property sign-on id) to more easily utilize 3rd-party websites requiring registration and authentication.

SNS handles almost all of the direct interaction with the user. At the central SNS site, users sign in and sign out of the service, enter data for their SNS profiles, approve the transfer of profile data, resolve profile data conflicts, and so on. The SNS site also handles most of the processing related to sign-in and authentication, profile editing, profile synchronization, and sign out.

Partner sites only need to redirect visiting users to the SNS site for sign in, profile synchronization, and sign out, and then handle any local registration operations that result, such as creating and updating a local user record, storing session state, and so on.

This page contains the following sections:



# 1.1 Interacting with the SNS Site

All interaction between your site and the SNS site takes place as a series of HTTP or HTTPS requests and responses, with each directed to a specific URL associated with a particular processing function such as sign-in, sign-out, and profile synchronization.

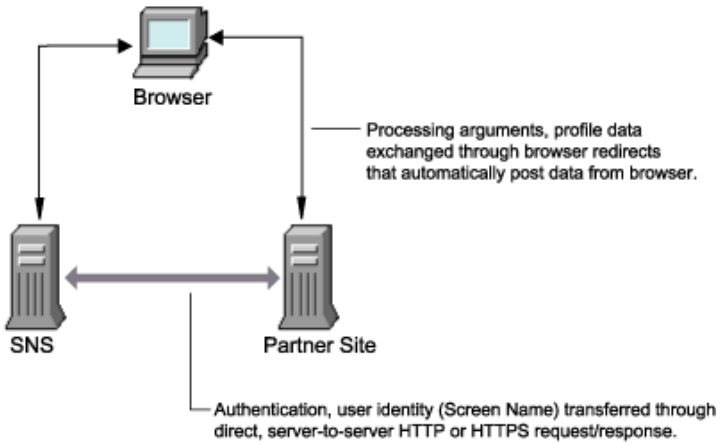


**Figure 1.1 Partner sites interact with the site though ordinary HTTP or HTTPS requests/responses.**

To pass data back and forth, the HTTP or HTTPS requests include query arguments in the form of name/value pairs sent to the targeted URL as form data. The arguments convey such information as a partner's siteId, a user's profile data, an authentication token, or other information.

You must develop a set of handlers (CGIs) that manage the interaction with the corresponding handlers at the SNS site. These local handlers generate and receive the necessary HTTP or HTTPS requests and arguments, and work directly with the site's registration system to create and update local user records. For more information, see Programming SNS.

In most cases, your site's handlers interact indirectly with the handlers at the SNS site through browser redirects. The handlers generate self-submitting forms that include the appropriate arguments as form data, then return those forms to the browser. At the browser, the forms automatically submit their form data to the URL of the targeted handler, redirecting

the user to that URL.

Your site's local handlers interact directly with the SNS site only when validating an SNS user's authentication token. In this case, the local handler opens a server-to-server HTTP connection with the SNS site, submitting the authentication token as posted form data. Validating the token over a direct connection helps protect the security of the service. For additional security, you can validate tokens over an HTTPS (SSL) connection to the SNS site.

## 1.2 Configuration Files

To get started you need to provide SNS with the local handlers at the partner site along with error pages, cobranding information, and more. This information is stored in a partner configuration file at SNS and is referred to as a partner's siteId. See Configuring Your SiteId for more information.

You also need to know how to test against the SNS test servers. The URLs for the test servers are located in Table 3.1.

## 1.3 SNS User Profile

The SNS user profile lets users quickly register at any partner site. It consists of a set of profile data that the user enters and stores with the Screen Name Service. When the user wishes to register at a partner site, the user simply approves the transfer of profile data to the partner site.

The SNS profile is made up of a defined set of profile fields, listed in Appendix A, SNS User Profile Schema. You can specify which SNS profile fields are required for registration at your site and SNS dynamically configures these fields to the registration page.

If the user is signing in or registering at your site and has not already provided the required data, the SNS site asks the user to enter the data before transferring the profile to your site. If the user does not want to provide the data, the SNS site lets the user cancel the profile transfer.

The fields you request from users can be configured as optional or required. You can request for SNS to perform input validation. To specify SNS profile fields that are required at your site, you use the Partner Site Configuration Editor to add those fields to your Partner Configuration file. Likewise, use the Partner Site Configuration Editor to add optional fields to your Partner Configuration file. For more information, see Configuring Your SNS Implementation.

In addition, if registration at your site requires profile fields that are not included in the SNS profile schema, you can use the Partner Site Configuration Editor to specify any additional profile fields. This registration option is discussed below under "Flexible Registration," and in more detail in Programming SNS.

To help users manage their profile data, SNS provides an automatic profile-synchronization capability. This capability enables users to keep their profile data consistent across partner sites, and also lets them modify their profile and then propagate the changes to other sites (or back to the SNS profile, if making a change at a partner site). For more information, refer to "Profile Synchronization."

## 1.4 Sign-In and Registration

- Creating New Screen Names
- Standard Sign-In and Registration
- User Authentication Levels
- Authentication
- Implementing Sign-In and Registration
- Option: Auto-Initiated Registration
- Option: Flexible Registration
- Option: Detecting Authentication Status (SNS 2.6 only)

SNS makes it easy for users to sign-in and register at any partner site. In many cases, users can sign in or register by simply approving the transfer of his or her Screen Name and profile data to the partner site.

To sign-in, the user needs a screen name and password. If the user does not already have a screen name and password from having subscribed to AOL, AOL Instant Messenger, Netscape AOL Instant Messenger, or CompuServe 2000, the user can create one by clicking on the "Don't have a Screen Name?" link on the SNS sign-in page and completing the registration

form.

Alternately, this page can be called directly via an SNS API if your choose to place a link on your site that points directly to this page. This API is useful for partners who rely on SNS registration and do not have their own registration and namespace.

For more information on user registration, see "siteLoginUrl Handler."

### 1.4.1 Creating New Screen Names

Once you determine that a user is not registered at your site through SNS, your site can automatically redirect the user to the SNS site's sign-in handler, mcLoginUrl, by passing the query string parameter createSN with a value set to "1" (True). The createSN parameter bypasses the normal sign-in page and goes directly to the "Create Screen Name" page. The value "1" specifies that you want to bypass the normal process. Value "0" (False) is the default value for the normal createSN parameter and directs the user to the normal login page.

Partners can choose to collect additional user registration information on their site that is not included in the standard SNS profile data schema. You can easily adapt the registration sequence so that your registration system can gather the additional information. Partners can utilize the SNS flexible registration option to collect site specific data on the registration page along with the standard SNS profile.

**Note**: Site specific data is not stored by SNS.

### 1.4.2 Standard Sign-In and Registration

You must configure and place on your site an SNS sign-in image which the user clicks when visiting your site. The sign-in image, available in SNS supported languages, is hosted at the SNS site. See Appendix C, Images for SNS Localization for more information about localizing the sign-in image. The image automatically links the user to the SNS site for sign-in. At the SNS site, the user provides Screen Name and password, then approves the transfer of the his or her Screen Name to your site.

### 1.4.3 User Authentication Levels

The Screen Name Service supports four different levels of authentication. Sign-in and sign-out sequences are related to the authentication levels you set for your site. At any given time a user can be authenticated at 1-4 levels simultaneously.

The four levels of authentication are as follows:

**Permanent Authentication - Level 0**

Level 0 provides support for the "Remember My Screen Name" option that does not require a user to sign-in to you site on repeat visits.

**Session Authentication - Level 1**

Level 1 provides support for session based authentication. Level 1 is the default SNS authentication level.

**Session Timed-out Authentication - Level 2**

Level 2 provides support for authentication credentials that expire after a configurable period of time (e.g. 30 min).

**Secure Key Timed-out Authentication - Level S**

Level S provides support for a secure personal identification that expires after a configurable period of time (e.g. 30 min), for example, the AOL Quick Checkout Security Key.

**Table 1.1 SNS Levels of User Authentication**

| Authentication Level | Signing In | Signing Out |
|---|---|---|

| | | |
|---|---|---|
| Level 0: Permanent Authentication | When the user signs in through a Level 0 application such as MyAOL and chooses "Remember my Screen Name," the user is authenticated at the site and will not be required to re-authenticate. Authentication is incrementally extended. Users who do not visit the site for a specified period of time will be required to re-authenticate at the next visit. | When the user signs out of a Level 0 application, the authentication is lost only for that application, but not for all Level 0 applications to which the user is registered at the time of sign-out. |
| Level 1: Session Authentication | When the user signs in through a Level 1 application such as AOL Calendar, Level 1 authentication is set for that user and is valid across all Level 0, Level 1, and Level 2 applications for the duration of the session. | When the user signs out of a Level 1 application, session authentication ends across all sites. Signing out from a Level 1 application also ends Level S Security Key authentication. Closing the browser ends session authentication across all sites. |
| Level 2: Session Timed-out Authentication | When the user signs in through a Level 2 application such as Mail on the Web, authentication of limited duration is set for that user. This authentication is valid across all Level 0, Level 1, and Level 2 applications for the duration of the session. If the user enters a Level 2 application after the authentication has expired, the user will need to re-authenticate using his or her existing AOL password. | When the user signs out through Level 2 application, the user's Level 1, Level 2, and Level S authentication ends across all sites.<br>If the user closes the browser, Level 1, Level 2, and Level S authentication ends across all sites. |
| Level S: Security Key Timed-out Authentication | When the user signs in through a Level S application such as Quick Checkout, he or she is taken to a second page at which a security key is required in order to enter the site. Level S limited duration security key session authentication is set for that user. Authentication is only valid across the Level S application for which the user has entered a key and only for the duration of the limited session.<br>If a user goes to another Level S application during the session, security key authentication will be required at that site.<br>If the user goes to a Level S application after the limited security key session has expired, he or she will be required to re-authenticate with their Level S security key.<br>**Note**: The Screen Name Service offers Level S partners the option to authenticate users at Level 0. This means that the user can visit a Level S site and choose to have their Screen Name and Password remembered at that site. On subsequent visits, the site will remember the user and only prompt for a security key when the user needs to authenticate at Level S. | When the user signs out from a Level S application, Level S authentication ends across all sites.<br>Closing the browser ends Level S authentication across all sites, except sites at which the user has chosen to be remembered. If the user ends a session by closing the browser window instead of clicking the "sign out" button, he or she will be recognized by screen name the next time they visit an SNS site, but will be challenged for a password. |

### 1.4.4 Authentication

Once the user has signed in to SNS and approved transfer of the Screen Name to your site, SNS redirects the user to your site, sending an authentication token as posted form data. For more information, see "Initiating Profile Synchronization" in

Appendix E, Code Examples and Troubleshooting.

Your site receives the authentication token and immediately validates it at the SNS site. If the token is valid, the user's Screen Name is returned to your site and used to sign in the user. See Figure 1.2 for a diagram of the sign-in flow.

If your site receives the Screen Name, but determines that the user is not yet registered locally, your site can request the user's SNS profile data from the SNS site by initiating a profile synchronization, as described in "Profile Synchronization."

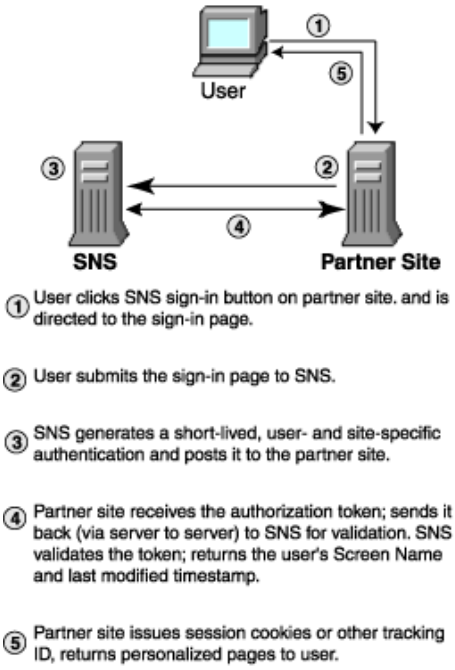


**Figure 1.2 Overview of the sign-in sequence**

### 1.4.5 Implementing Sign-In and Registration

To implement sign-in and registration at your site:

- Place a correctly configured SNS sign-in image on your site. See Placing the SNS Images on Your Site.
- Provide a siteLoginUrl handler.
- Provide a siteLoginFailUrl handler.
  The user is redirected to the siteLoginFailUrl handler upon failure of an SNS login request.
- Provide a siteLoginCancelUrl handler.
  When the user cancels the sign-in sequence through the SNS screens, the SNS site redirects the user to your site's siteLoginCancelUrl handler.
- Implement Profile Synchronization.

### 1.4.6 Option: Auto-Initiated Registration of SNS Users

This option lets you simplify the registration of SNS users who have begun the sign-in process at your site, but who are not yet registered. It lets you tell the SNS site to initiate a profile synchronization for all new users automatically, as soon as they sign in to SNS (set siteProfPush=Y). SNS keeps track of the partner sites at which each Screen Name is currently registered so that when a user signs in, the service can determine whether the user is registered at your site.

If you use the auto-initiated registration option, SNS automatically checks the registration status of users when they sign in to the service from your site. If a user is not yet registered, SNS automatically initiates a profile synchronization, sending the user's SNS profile data to your site.

This option makes registration simpler for the user, because the user can approve the transfer of the Screen Name and profile data in a single step. In the non-auto initiated registration process, the user must approve the transfer of Screen Name and profile data in two different steps. The two step registration is discussed in Flexible Registration below.

The option also simplifies the sign-in logic required at your site, because your sign-in handler no longer has to determine whether the user is registered to initiate a profile synchronization.

To use this option, all you have to do is set siteProfPushEnabled=y in your Partner Configuration file (siteId). For more information, see Configuring Your SiteId. Upon submission, the user profile is posted on the siteProfSyncUrl specified in the siteId.

For more information about configuration, refer to Configuring Your SNS Implementation.

### 1.4.7 Option: Flexible Registration

If your site requires user profile information in addition to that provided for in the SNS profile data schema, you can extend the standard registration process to gather the additional information from the users on the same registration page. The additional fields are only presented and not stored at SNS and, therefore, are not available for reverse profile synchronization.

With this option, your site obtains the user's profile data through a two-part registration page. The top section of this page collects SNS-specific information, such as the user's name. The bottom section collects user data required by your site. You can customize this site-specific section as needed, including both optional and required fields. Site-specific fields can be for any category or topic. Common examples include: partner marketing opt ins/outs, user preferences, user interests, and more.

Use the Partner Site Configuration Editor to implement site-specific registration by completing the Site Specific registration section. See Configuring Your SNS Implementation for more information. SNS creates the registration page and once implemented, determines that required site-specific fields contain data, returning an error message to the user if those fields are not filled.

You are responsible for validating and storing site-specific registration data. When the user submits the form, your local registration handler evaluates the form data to ensure that the user provided valid data for all required fields.

**Note**: The site specific data is not stored by SNS and cannot be used in profile synchronization.

See Programming SNS for the details about implementing flexible registration.

### 1.4.8 Option: Detecting Authentication Status

SNS Version 2.6 supports a new feature that allows partners to determine the authentication status of users before presenting them with an SNS sign-in page. This user-status-checking feature works as follows:

- If the user **is not** authenticated in the SNS network, the user is directed to a partner-specified URL or other location. (By contrast, the typical behavior is to direct an unauthenticated user to an SNS sign-in page.)
- If the user **is** authenticated in the SNS network and then visits an external partner site (for specific strategic partners only), then the user is not required to click the SNS sign-in button. In effect, the user bypasses SNS and is automatically passed into the partner site.

With this feature, partner sites can check whether a user is a member of the SNS network before presenting the SNS sign-in page. Partners have more flexibility as a result. For example, partner sites might choose to display different promotions or pages, depending on the user's status.

For details on the programming logic behind this feature, see Chapter 2, particularly section 2.1.1.3, Auto-Detection of Authentication Status.

## 1.5 Profile Synchronization

SNS offers an automatic profile synchronization capability that lets users share a centralized set of profile data with partner sites during registration, then keep that profile data synchronized with their central SNS profile data.

For the user, profile synchronization is a simple and rapid process that takes place at the SNS site - the user interacts with the SNS screens to resolve any profile data conflicts and approve the transfer of the profile data to the partner site. In some cases, if the partner site requires profile data that the user has not yet supplied, the SNS site also asks the user to provide that data before transferring the profile data.

The partner site automatically initiates profile synchronization whenever necessary:

- During sign-in, the partner site initiates profile synchronization if the user's SNS profile data is newer than that stored locally for the user. The partner site compares the current timestamp of the SNS profile data - obtained from the SNS site during sign-in and profile synchronization - with that stored during the previous profile synchronization.
- During sign-in, the partner site may also initiate profile synchronization if it determines that the user is not yet registered at the site.
- When the user performs local edits on any profile data, the partner site initiates a profile synchronization to ensure that the user has an opportunity to copy those changes back to the user's central SNS profile.

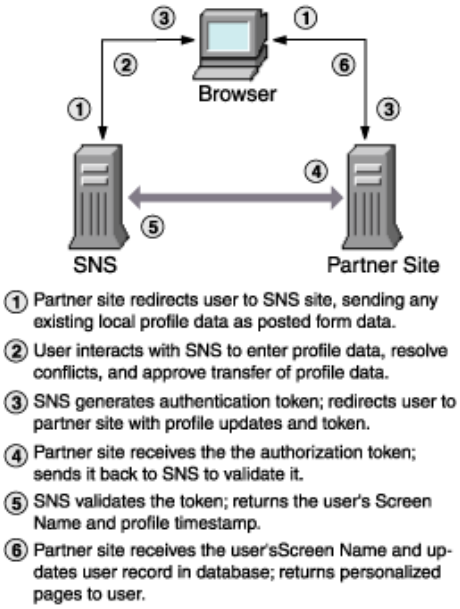


**Figure 1.3 Overview of the profile synchronization sequence.**

To initiate profile synchronization, your site prepares a self-submitting form that points at the SNS site's profile synchronization handler, sending the user's current local profile data - if any - as posted form data. When the SNS profile synchronization handler receives the user's local profile data, it compares it with the user's SNS profile data, to determine which fields, if any, are in conflict. It presents screens that ask the user to resolve any profile data conflicts, by choosing to keep the SNS data, to keep the local data, or to continue without synchronizing the data.

If the user is registering at your site, the SNS site also asks the user to provide data for any SNS profile fields that your site requires, but which the user has not yet supplied. The SNS site also presents inputs for any optional fields that are requested by your site. (You define your site's required and optional fields in your Partner Configuration file (siteId).)

## 1.5.1 Implementing Profile Synchronization at Your Site

To implement SNS profile synchronization at your site:

- Provide a siteProfSyncUrl handler
- Provide a siteProfSyncFailUrl handler
- Provide a siteProfSyncCancelUrl handler

Once the user has resolved any profile data conflicts and provided any profile data required by your site, the SNS site redirects the user to your site, sending any profile data updates, an authentication token, and other information as posted

form data. Your site validates the authentication token, then writes to (or creates) the user's record in your registration database.

For more information, see Initiating Profile Synchronization in Appendix E.

## 1.6 Sign-Out

As we discussed earlier, the Screen Name Service has four levels of authentication. SNS enables the user to sign out of any partner site without necessarily signing out of all partner sites. When the user signs out of an application, the service automatically signs the user out of all sites requiring a certain level of authentication, but not necessarily out of all SNS sites. Sign-out behavior based on authentication level is discussed in Table 1.2 below.

If signed in to and visiting your site, the user can sign out by clicking an SNS sign-out image that you have configured and placed on the site.

The sign-out behavior of a site is dependent on the type of user authentication. The SNS site effects sign-out across partner sites using the criteria outlined in Table 1.2:

**Table 1.2 Sign-out Behavior Based On Authentication Level**

| Authentication Level | Sign-Out Behavior |
|---|---|
| Level 0 | Authentication ends only for the one Level 0 application, not for all Level 0 applications to which the user is registered at the time. |
| Level 1 | Authentication ends across all sites. Level S PIN authentication also ends. |
| Level 2 | Level 1, Level 2, and Level S authentication ends across all sites. |
| Level S | Level S authentication ends across all sites. |

SNS displays a pop-up screen confirming the user has signed out.

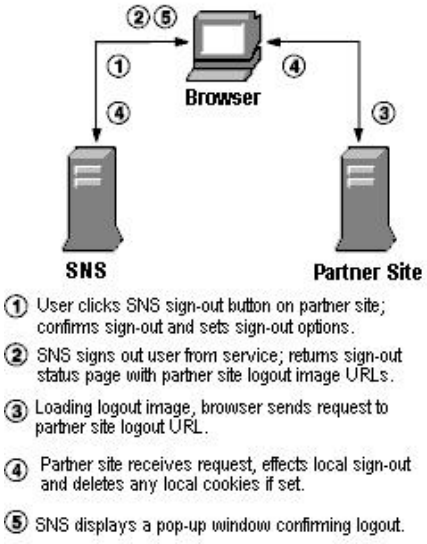


**Figure 1.4 Overview of the sign-out sequence.**

When the sign-out handler at your site receives the request, it modifies the session state that is stored for the user, so that the user is no longer signed in to your site. If your site stores the session state using cookies, the handler should send a response that erases any SNS session cookies set by your site.

### 1.6.1 Implementing Sign-Out at Your Site

To implement SNS sign-out at your site, you need to:

- Place a correctly configured SNS sign-out image on your site.

- Provide a siteLogoutUrl handler
- Provide a siteLogoutFailUrl handler

# 1.7 Local Profile Editing

You can offer SNS users the same capability to edit their local profile data as you offer to other users. To offer this capability, all you have to do is adapt your existing profile-editing handler so that it initiates a profile synchronization sequence after writing the new profile data to the user's record. The profile synchronization ensures that the user has the opportunity to copy the new profile data back to the SNS profile.

Additional information about how to modify your local profile-editing handler is provided in "Local Profile Editing Handler".

## 1.7.1 Implementing Local SNS Profile Editing at Your Site

To let SNS users edit their profile data at your site, extend your existing profile-editing handler so that it: initiates a profile synchronization (existing user) after writing the new profile data to the user record.

# 1.8 Privacy and Security

SNS is designed to protect the integrity of users' Screen Names and profile data, using several mechanisms to prevent spoofing and other types of misuse:

- The service uses a secure sign-in environment
    - Sign-in for AOL/CompuServe members is cookie-less and is managed centrally
    - Sign-in for other users takes place over an SSL connection. Sign-ins are managed using a secure cookie system that prevents cookie theft or replay and spoofing - only AOL-hosted pages accept the user's name and password.
- The service transfers user identity (Screen Name) to a partner site only over a direct, server-to-server connection, and only to a partner server that matches the domain and IP address specified in the Partner Configuration file.
- The service generates authentication tokens that partners can use to validate the integrity of user data received.
    - Authentication tokens include the SNS ID of the partner site, to prevent partner impersonation.
    - Authentication tokens are opaque, short-lived, and user-specific, to prevent theft, replay or repurposing.
- The service transfers Screen Name and profile data to partner sites only after obtaining the user's permission to do so.
- Sign-in to the service is session-specific - if the user ends the browser session, the user must sign in to the service again.

# 1.9 Flexible UI and Partner Cobranding

The Screen Name Service provides you with the flexibility to customize your site's look and feel. For example, you can supply templates that will be dynamically inserted into the pages that SNS hosts (such as sign-in and registration).

The Screen Name Service provides two layout options:

- A fully customizable (flexible) layout in which the look and feel of the pages matches those of the rest of your site (see Figure 1.5).
- A default layout with a white background, sign-in and registration modules, and space provided for the partner's logo, benefits statement, and link to the privacy policy page (see Figure 1.6).

The flexible layout incorporates a modular approach that allows you to customize the SNS process to match the look and feel of your web site. When the user enters the SNS process, the impression is that the authentication or registration process occurs within the environment of the rest of your site.

## 1.9.1 Flexible Layout

In the flexible layout option, the partner provides a template that surrounds the SNS sign-in and registration modules. Figure 1.5 below shows a sample layout.

SNS lets you cobrand and customize the screens that users see when signing in to your site, when registering, or when synchronizing their profiles on your site. Note that the template you provide will be viewed within an area 345 pixels wide. In addition, the partner logo you provide must have dimensions of 345 pixels wide by 45 pixels high.

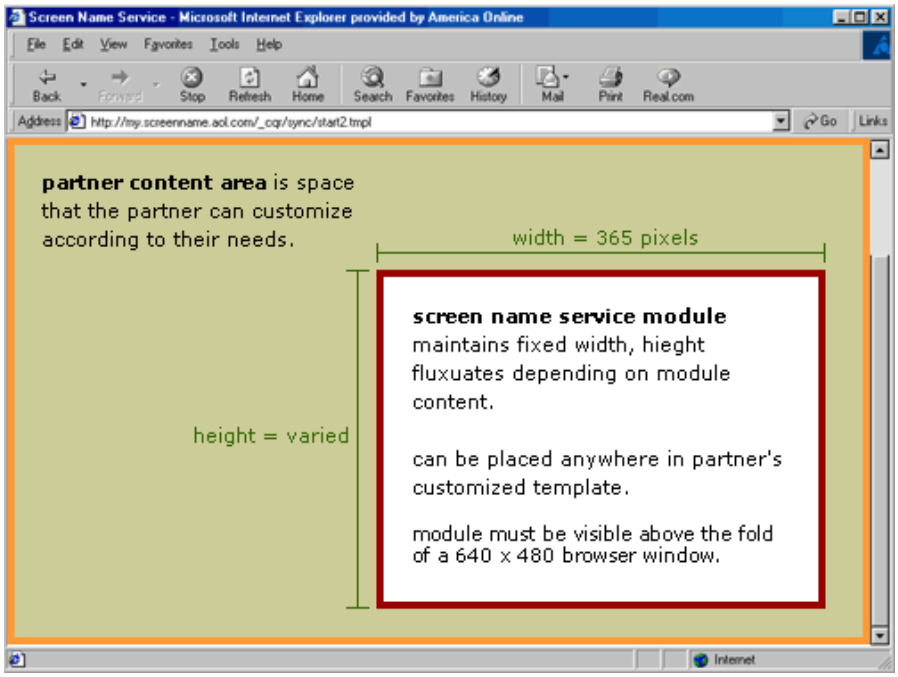


**Figure 1.5 Flexible User Interface Layout**

When entering the SNS process on a site utilizing the Flexible UI, the user gets the impression that they are authenticated or registered within the partner's environment. The SNS Flexible UI template lets you customize the SNS environment to match your site's look and feel. For more information, see the Screen Name Service UI Style Guide.

## 1.9.2 Customizable Modules

All of the login and all of the registration modules are customizable either individually or collectively. The modules are configurable as far as the colors of the font, borders, and backgrounds. The space around the module is yours to use as you wish, for banner ads, site maps, etc. You may use any special effect HTML tags to organize content to make the look and feel match your own UI flow.

Partners provide and host the template on their own servers. Specify the template URLs (as absolute paths) in the siteId. SNS fetches the template at run time, hosts it, and presents it to the user.

The template can be either static or dynamic. SNS passes parameters to the template. Partners can then generate unique HTML for one or all of the pages that SNS presents to the user.

SNS places limitations on the Flexible UI. For example, using frames or JavaScript could expose browsers to security holes, so do not use them in the template you provide. For more information on Flexible UI design guidelines, see the "Page Customization" section of the SNS UI Style Guide.

For information on implementation and configuration, see Flexible UI Template and Parameters and Configuring Your SiteId.

## 1.9.3 Default Layout

Even though we recommend that partners utilize the flexible layout, SNS does provide a fixed (default) layout. If you choose the fixed layout, you provide:

- A Partner-specified logo
- A link to the partner's privacy policy page
- A statement about the benefits of registering at your site - that is, what you provide to registered users that you do not provide to other users. (255 characters max.)
- Your site's display name (shown on Registration pages)

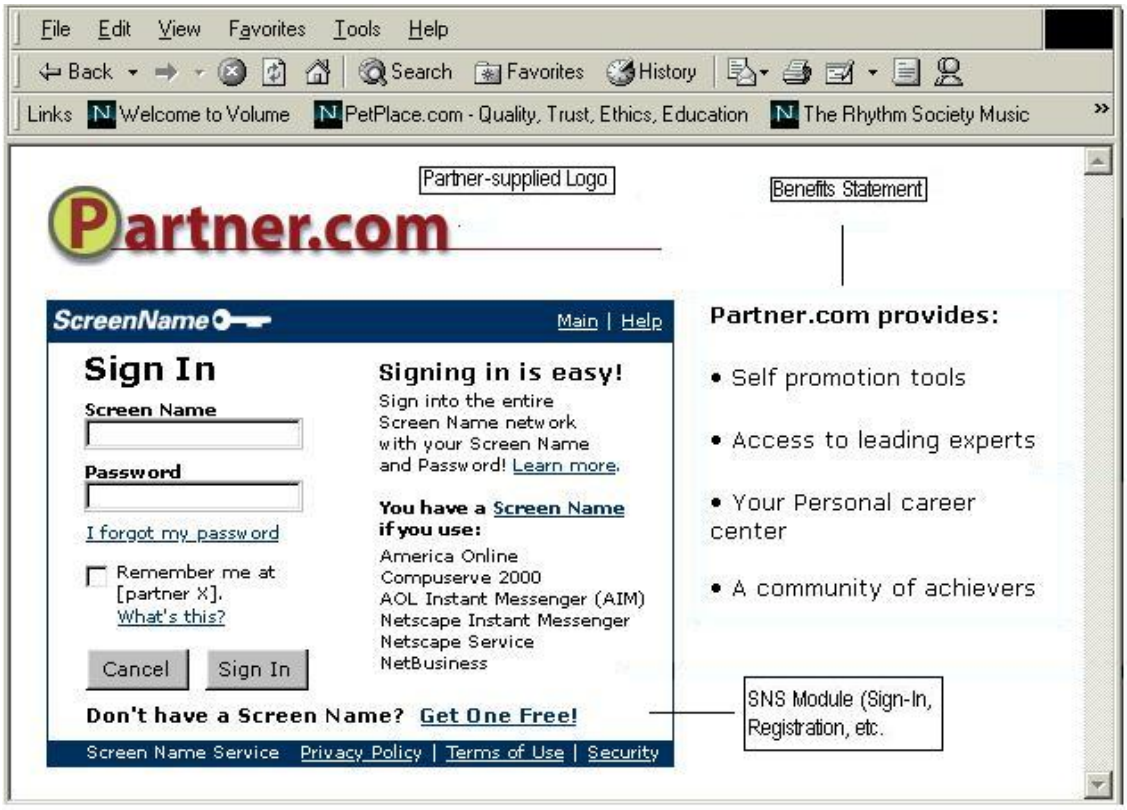


**Figure 1.6 Default User Interface Layout**

**Note**: If you try to use both the fixed and the flexible layouts, the Screen Name Service will always default to the flexible layout template.

To define the fixed layout cobrand options, you enter data or URLs in the cobrand fields in your Partner Configuration file (siteId). For more information about these options, refer to the Default Cobranding Configuration.

## 1.10 Implementation Planning

Implementing SNS at your site is straightforward, especially if your site already has a registration system and is using a dynamic page-generation engine to offer users personalized content or services.

Before you implement the service, read the following sections highlighting issues you need to consider and decisions you need to make:

- What Levels of Authentication Will You Support?
- Will You Use Auto-Initiated Registration?
- Where Will You Place the Sign-In and Sign-Out Images?
- How Will You Address Partner Cobranding in Your UI?
- How Will You Handle Name-Space Integration?

For specific information about how to implement the handlers required by SNS, refer to Programming SNS. Also review the

milestones checklist in Appendix B.

### 1.10.1 What Levels of Authentication Will You Support?

To expedite the sign-in process, you can require only a username and a password, with the option for SNS to remember that password the next time the user visits your site, or if you require greater security, SNS supports authentication based on session-based password entry, session timed-out authentication and security key authentication.

This option is described in more detail in User Authentication Levels.

### 1.10.2 Will You Use Auto-Initiated Registration?

To expedite the registration process for new SNS users at your site, you can have SNS automatically send the user's profile data to your site once the user successfully signs in to the service.

This option benefits both the user and your site, and is described in more detail in "Auto-Initiated Registration of SNS Users".

To use the option, all you have to do is set siteProfPushEnabled=y in your Partner Configuration file.

### 1.10.3 Where Will You Place the Sign-In and Sign-Out Images?

If you are using the standard sign-in sequence, you must place specially configured sign-in and sign-out images on your site's pages. Although these images are hosted from the SNS site, you must place the appropriate HTML for the images in your pages, ensuring that the image SRC and HREF attributes point to the correct URLs, as defined in the SNS Configuration file. If you want, you can have your site dynamically generate and configure these images on your pages, based on the user context.

You can place the sign-in and sign-out images on any of your site's pages, according to your needs. At a minimum, place the images on your site's own registration page, if you have one. If you want to place the images on other pages, to make it easier for users to sign-in through SNS, you can place the images wherever you have a link to your site's registration page.

Expanding the placement of the images benefits your site by helping you to sign in more users to your system, more quickly. It benefits SNS users by making it easier for them to register or sign-in to your site, and it eliminates the extra step of going to your registration page before linking to the SNS site.

For information on configuring the images, refer to "Placing the SNS Images on Your Site". Also see Appendix C for examples of the images and their URLs.

### 1.10.4 What Kind of UI will You Provide?

The Screen Name Service provides two layout options:

- A fully customizable (flexible) layout in which the look and feel of the pages matches those of the rest of the partner's site.
- A default layout with a white background, sign-in and registration modules, and space provided for the partner's logo, benefits statement, and link to the privacy policy page.

For details, see the section, Flexible UI and Partner Cobranding.

### 1.10.5 How Will You Handle Namespace Integration?

With SNS, your site makes use of the Screen Name as the key to user identification. If your site already has a registration system and a database of registered users, develop a policy for integrating the Screen Name namespace with your site's namespace, to avoid any potential conflicts.

Here are ways that you can manage namespace integration at your site:

- When SNS users register at your site, you can apply a uniform mapping to their screen names, to generate a set of unique, consistent user IDs for SNS users. In effect, this technique creates a separate partition in your database that

contains only SNS users.

For example, you might specify that all SNS users are to be assigned the local user IDs of the form "ScreenName.sn".

Note that when you map a Screen Name, the user still signs in to the SNS service as ScreenName, not ScreenName.sn. To that extent, the mapping is transparent to the user. However, if you have personalized greetings or text on your pages, those reflect the user ID, rather than the Screen Name, for example, "Welcome, ScreenName.sn". If necessary, you can have your site reverse-map the user ID when displaying it on a page.

- You can let SNS users register by Screen Name, if the corresponding user ID is not already taken in your local namespace. If the user ID is already taken, you could automatically apply a mapping to produce a unique user ID.
- You can migrate all locally registered users to AOL Screen Names. The advantage of this approach is that all users have access to the AOL Instant Messenger Service, allowing the site to offer chats for its users, and eventually send instant alerts directly to the user, along with other future services that will be based on Screen Names. This approach is especially appropriate for new sites.
- Additionally, consider whether you want to let users bind pre-existing records based on user ID to a new record based on Screen Name.

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# Chapter 2: Programming SNS

**Note: Level S authorization is unsupported until Fall 2002. Disregard any documentation references to Level S.**

This chapter describes the development tasks required to implement the Screen Name Service. If you have not already read the Technical Overview, do so before continuing.

There are checkpoints in every SNS implementation process where the partner needs to perform specific implementation tasks. AOL supplies a list of recommended milestones to help you identify these checkpoints, as well as help guide you through your implementation process. Although your development and implementation scenario may vary somewhat from these milestones, you will find them to be a valuable planning tool. See Appendix B for a complete list of these SNS Milestones.

The milestones include estimated durations for key tasks such as signing the agreement with AOL; attending a Screen Name Service overview; reviewing this implementation guide; obtaining certain information such as your Development SiteId, a UI resource style guide, and your development schedule; and the processes for putting your SNS site into production.

If your site requires secure authentication (Level S), you must route your data through secure server (https). The field names for secure URLs are noted below by adding the ending "_S" to the name of the regular handler. If your application uses level 0, 1, or 2 authentication, use the Field Name that ends in "Url" and regular http. If your application uses level S authentication, use the Field Name that ends in "Url_S" and secure https.

In the following table, the suffix [_S] is added to indicate both the regular and the secure URL in the same table cell.

**Table 2.1 Handlers and Error Pages Partners Must Provide**

| Handler or Page | Description |
|---|---|
| siteLoginUrl[_S] | Manages the sign-in of registered users; initiates registration for new users. |
| siteProfSyncUrl[_S] | Lets users share their profile data with your site for registration and synchronize SNS profile data with that stored locally at your site. |
| siteLogoutUrl[_S] | Lets users sign-out of your site. |
| siteLoginFailUrl[_S] | SNS redirects the user to this URL when internal SNS errors prevent the successful sign-in of the user. |
| siteLoginCancelUrl[_S] | SNS redirects the user to this URL when the user cancels the sign-in sequence (by not approving the transfer of the user's Screen Name to your site). |
| siteProfSyncFailUrl[_S] | SNS redirects the user to this URL when internal SNS errors prevent a profile synchronization. |
| siteProfSyncCancelUrl[_S] | SNS redirects the user to this URL when the user cancels a profile synchronization. |

| | |
|---|---|
| siteLogoutFailUrl[_S] | SNS redirects the user to this URL upon failure of an SNS logout request. |
| SNS sign-in error page | A page displayed (or generated) by the siteLoginUrl, siteLoginUrl_S, siteLoginFailUrl, or siteLoginFailUrl_S handler, under error conditions. |
| Registration error page | A page displayed (or generated) by siteProfSyncUrl, siteProfSyncUrl_S, siteProfSyncFailUrl, or siteProfSyncFailUrl_S handler whenever an SNS user fails to successfully register at your site. |

In addition, you must address the following tasks:

- Preparing your registration database for SNS user records, including SNS-specific entries
- Placing and configuring the SNS sign-in/sign-out images on your pages
- Configuring the flexible UI template and its parameters

## 2.1 Primary Core and Error Handlers

Core handlers manage the core interactions between the SNS site and your site's registration system.

**Note**: This document refers to handlers - whether at the SNS site or at your site - by their configuration field names, rather than by their actual URLs. For example, this document refers to the profile-synchronization handler at the SNS site as the mcProfSyncUrl handler.

If your site requires secure authentication (Level S), you must provide secure (https) core handlers. The core handlers listed below ending in "Url_S" are for use with Level S sites. If your application uses level 0, 1, or 2 authentication, provide the core handler that ends in "Url." Occasionally the secure handler will be noted by adding the ending [_S] to the name of the regular handler.

For more information, see User Authentication Levels.

You must modify your local profile editing handler and provide one or more of the SNS handlers listed in Table 2.2:

**Table 2.2 Core Handlers**

| Handler | Description |
|---|---|
| siteLoginUrl | Manages the sign-in of registered users; initiates registration for new users. |
| siteLoginUrl_S | Manages the sign-in of registered users; initiates registration for new users at sites requiring Level S (secure) authentication. |
| siteProfSyncUrl | Lets users share their profile data with your site for registration and synchronize SNS profile data with that stored locally at your site. |
| siteProfSyncUrl_S | Lets users synchronize SNS profile data with that stored locally at your site and share their profile data with your site for registration at sites requiring Level S authentication. |
| siteLogoutUrl | Lets users sign-out of your site. |
| siteLogoutUrl_S | Lets users sign-out of sites requiring Level S authentication. |

If your site requires Level S authentication, the user is directed to the siteLoginURL_S handler. If your site uses Level 0, 1, or 2 authentication, the user is directed to the siteLoginURL handler.

If your site does not require Level S authentication, then you do not need to provide the "_S" URLs listed in the above table.

There are a variety of ways to implement the handlers, depending on your production environment, registration system, or other factors. Because the handlers are likely to be implemented differently at each partner site, the following sections provide general algorithms for the handlers and illustrate the essential requirements for each handler.

Although the handlers you develop might contain additional actions or features, or might employ different techniques to achieve the same result, the handlers must interact with the SNS site in the way described in the algorithms.

For a more detailed view of a typical implementation of the handlers, obtain and review the SNS sample sites. Sample sites are available from your Integration Engineer or by sending an email to sns-support@netscape.com.

### 2.1.1 siteLoginUrl or siteLoginUrl_S Handler

The siteLoginUrl handler is an application or script residing at your site that receives and processes form data sent by the SNS site. Define the actual URL associated with siteLoginUrl in your site's Partner Configuration file (siteId). The siteLoginUrl or siteLoginUrl_S handler is developed by writing a new application or script, or by making modifications to the existing registration processes.

The function of the siteLoginUrl or siteLoginUrl_S handler is to manage the interaction between the SNS site and your registration system, such that the user is able to sign-in to your site using an AOL-issued Screen Name. The handler manages signing in users who are already registered at your site, as well as registering and signing in new users at your site.

The sign-in sequence begins as the user clicks a SNS sign-in image on your site. For more information on sign-in and sign-out images, click here. The image redirects the user to the SNS site. The SNS server authenticates the user and passes the user's indentity to your site.

If your application's authentication level is 0, 1, or 2, SNS redirects the user to the siteLoginURL as specified in your siteId. If your site requires Level S (secure) authentication, the user is redirected the user to the siteLoginURL_S as specified in your siteId.

Before the siteLoginUrl or siteLoginUrl_S receives any data from SNS, the SNS site will have already, a) Generated a site- and user-specific authentication token for the user, and b) Redirected the user to your siteLoginUrl, sending the mcAuth token as posted form data.

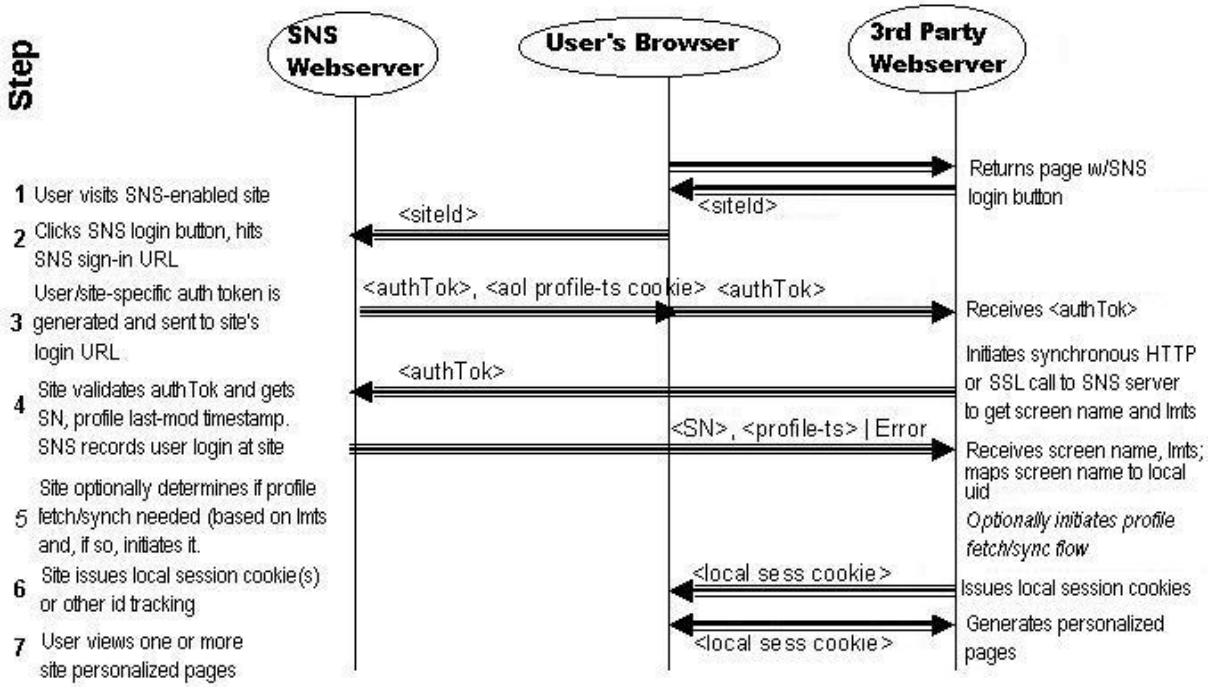


**Figure 2.1 Overview of the interaction between the siteLoginUrl handler and the SNS site during sign-in.**

From this point, the general algorithm for the siteLoginUrl handler is:

1. The siteLoginUrl or siteLoginUrl_S handler receives the mcAuth token from SNS as posted form data.

| Argument | Description |
|---|---|
| mcAuth | Site- and user-specific authentication token generated by SNS or provided by the partner site. |
| siteState (optional) | Optional, arbitrary field containing URL-encoded 3P-site state data to be subsequently returned to the 3P login and login failure URLs. This argument could, for example, be the URL of the 3P page the user was on before clicking the MC login button.<br><br>**Note**: This argument must contain ASCII characters only. |

2. After receiving the mcAuth token, the handler immediately attempts to validate the token with the SNS server at mcLoginTokValUrl or mcLoginTokValUrl_S.

- To validate the token from a Level 0, 1, or 2 application user, the handler initiates a synchronous HTTP call directly to the server at mcLoginTokValUrl, passing the user's mcAuth token and your siteId as arguments, using either the POST or GET methods.
- To validate the token from a Level S application user, the handler initiates a synchronous HTTPS (SSL) call directly to the server at mcLoginTokValUrl_S, passing the user's mcAuth token and your siteId as arguments, using either the POST or GET methods.

| Argument | Description |
|---|---|
| mcAuth | Site- and user-specific authentication token generated by SNS. |
| siteId | Your site's ID number, as registered with SNS. |

When the SNS site receives the request, it attempts to decode and validate the mcAuth token, to make sure that it is has been sent by the correct site and has not been tampered with. To enable SNS to validate the mcAuth token, you must ensure that all of the following conditions are met:

- The validation request must be made over a direct, server-to-server connection (HTTP or HTTPS).
- The validation request must come directly from a machine whose IP address you listed in the siteServerIps parameter of your siteId.
- The validation request must come directly from a machine in the domain that you specified in the siteDomain parameter of your siteId.

The server at mcLoginTokValUrl or mcLoginTokValUrl[_S] returns the result of the validation attempt to the siteLoginUrl handler as an HTTP 200 response. It includes the validation result as the body of the response.

- If SNS successfully validated the user's mcAuth token, the response includes this body content: "sn=*ScreenName*&lmts=*lmts*&disSN=*displayName*&authLev=*authLev*"

  The query parameters are described below:

  | Parameter | Description |
  |---|---|
  | sn | Defines *ScreenName*, which is the unformatted screen name of the user. |
  | lmts | Defines the last-modified timestamp, or lmts. *ltms* is an integer value that denotes the modification date of the user's profile stored on SNS. Possible values are:<br>▪ A positive integer representing the last modification date of the user's profile.<br>▪ Zero (0) if the user does not yet have profile data with SNS.<br>▪ Minus 1 (-1) if SNS is temporarily unable to access the user's timestamp. |
  | disSN | Defines the formatted screen name; that is, the name with optional spaces and capitalization. |
  | authLev | Defines one or more authorization levels that indicate the user's current authorization. Possible values are 0, 1, 2, or S, as well as a comma-separated list of these values. |

  **Sample string:** "sn=johnsmith&lmts=967136978&disSN=John Smith&authLev=0,1"

- If SNS received the request but could not validate the token, the response includes this body content: "error=n" where n is one of the error codes listed in Table 2.4. Token validation errors and handling are discussed in more detail in "siteLoginUrlError Handling."

3. Assuming a successful mcAuth token validation response, the handler obtains the Screen Name, last-modified timestamp, and authentication level from the response.

4. Partners can choose to drop an application-specific cookie for that particular authentication level (the one returned in the authLev parameter). For example, if the returned authLev is 0, you can drop a permanent cookie, thereby allowing your site to recognize the user upon a repeat visit. The permanent cookie lets you avoid redirecting users back to SNS. (SNS would simply redirect the "remembered" user back to your site with a level 0 authentication.)

   Similarly, a partner can drop a timed-out cookie if the authLev is 2. This cookie time-out must match the timeout specified in the siteId. After the cookie times out, the user could then be directed back to SNS for re-authentication. **Note:** These cookies must be deleted when the user logs out.

5. Next, the siteLoginUrl handler checks to see whether the user is already registered at your site, by looking for a local user ID in your registration database that matches the user's Screen Name.
   Depending on your site's namespace policy, the handler might need to apply a namespace mapping to the Screen Name -- to obtain a valid local user ID -- before querying the registration database for a matching user ID.

   For example, if your namespace policy is to add the suffix ".sn" to all SNS Screen Names, then the handler should map the Screen Name "ScreenName" to the local user ID "ScreenName.sn" before querying the database.

   - If the handler finds a matching user ID, it should assume that the user is already registered at your site and proceed to Step 5, below.
   - If the handler does not find a matching user ID, it should assume that the user is not yet registered at your site, and should initiate a profile synchronization (for new user), as described in "Initiating Profile Synchronization for a New User."

6. Having determined that the user is already registered at your site, the handler should store session state information in a way that is appropriate for your site's registration system (for example, cookies). See "Initiating Profile Synchronization for an Existing User" for more information. The session state data should include:

   - The user's local user ID (but not the user's Screen Name)
   - A marker of some kind that indicates that the user signed in through SNS (versus signing in through your site's registration system).

7. Compare the user's local timestamp to the timestamp available from SNS.

8. To determine whether a profile synchronization is necessary, the handler determines whether the last-modified timestamp of the SNS profile, obtained from the SNS site in Step 2, is greater (more recent) than the timestamp stored in the user's local record. (See Step 5). A successful request returns a response of 200 from SNS and generates a short-lived authentication token that you pass as a parameter within your self-submitting form.

   The form of this response is: **authTok=*authTok***. (where ***authTok*** is the actual authentication token)

9. Before initiating profile synchronization, you must have a valid authentication token. If your site has an existing authentication token, you may use it. If not, you can obtain one by a server-to-server call to mcProfTokGenUrl, **http://sns-certify.web.aol.com/_cqr/mcProfTokGenUrl.psp?siteId=*your_siteId*&sn=*yourSN***

10. Generate a self-submitting form that passes your **siteProfMod**, **mcProfMod**, **siteId**, **siteState**, **local profile data**, and your generated **authentication token**. You must pass the authentication token as '**mcAuth**' or you will receive an error=110, which flags any missing expected arguments.

    For code snippets and detailed instructions for acquiring and passing authentication tokens, see Appendix E, Sample Code.

If your siteLoginUrl handler does not perform the profile synchronization described in the previous step, then the concluding action of the handler is to redirect the user to the appropriate URL on your site, as a registered, signed-in user. (If the handler does perform the optional step described above, then this action is performed by the siteProfSyncUrl handler instead.)

#### 2.1.1.1 Initiating Profile Synchronization

To initiate a profile synchronization for a new user, the siteLoginUrl handler redirects the user, via a self submitting form, to mcProfSyncUrl (or mcProfSyncUrl_S if your site requires Level S authentication), supplying the following arguments:

**Table 2.3 mcProfSyncUrl[_S] Arguments for Synchronizing Profile Data**

| Argument | Description |
|---|---|
| siteId | Your site's ID number, as registered with SNS. |
| siteState (optional) | Optional field containing arbitrary site or session data. Contains data to be subsequently returned to your siteLoginUrl[_S] or siteLoginFailUrl[_S] handlers. For example, it could contain the URL of the page from which the user clicked the SNS sign-in image. |

| | |
|---|---|
| siteProfMod | Boolean value, set by your site, that indicates whether the user has modified local profile data while visiting your site. (1 = true, 0 = false)<br><br>For new users, always set siteProfMod=0. |
| mcProfMod | Boolean value, set by your site, that indicates whether the user has modified SNS profile data since visiting your site. (1 = true, 0 = false)<br><br>Set this argument to 1 when the SNS profile last-modified timestamp is greater than that of the local profile data.<br><br>For new users, always set mcProfMod=1. |
| local profile data (for existing users only) | Optional set of profile fields and values, limited to those defined in Appendix A, "SNS User Profile Schema". (For new users, no profile data is submitted.) |
| charset (for existing users only) | The character set in which profile data is encoded. Possible values are:<br>iso-8859-1, for all lang-locales except ja-jp and zh-cn<br>Shift_JIS, for the ja-jp lang-locale (Japanese)<br>gb18030, for the zh-cn lang-locale (Chinese)<br><br>If no value is supplied, the default iso-8859-1 (Latin-1) is assumed. |
| mcAuth | Your site's existing authentication token, or an authentication token obtained from mcProfTokGenUrl. |

**Note**: In the following sections, the secure handlers are noted by adding the ending "[_S]" to the names of the regular handlers.

**Initiating profile synchronization for a new user**

To initiate a profile synchronization for an new user, the siteLoginUrl handler follows these steps:

1. If the partner site does not provide its own authentication token, the handler acquires an authentication token via server-to-server request to mcProfTokGenUrl,
   **http://sns-certify.web.aol.com/_cqr/mcProfTokGenUrl.psp?siteId=*your_siteId*&sn=*yourSN***
2. The handler generates a self-submitting form that stores as form data the arguments just described. The form should be configured to submit the form data to the SNS server at mcProfSyncUrl or mcProfSyncUrl_S and should submit data using the POST method.
3. The handler returns the self-submitting form to the client, which automatically redirects the client to the SNS server at mcProfSyncUrl or mcProfSyncUrl_S, sending the form data using the POST method.

**Note**: If both siteProfMod and mcProfMod are false, then the profiles are already synchronized. In this case, do not initiate a profile synchronization.

**Initiating profile synchronization for an existing user**

To initiate a profile synchronization for an existing user, the siteLoginUrl or siteLoginUrl_S handler follows these steps:

1. The handler retrieves the user's local profile data from your registration database, and then performs any translations of profile field names or values necessary to bring them into conformance with the SNS profile data specification. For more information, see Appendix A, SNS User Profile Schema.
2. If the partner site does not have a previous authentication token from the session, the handler acquires an authentication token via server-to-server request to mcProfTokGenUrl,
   **http://sns-certify.web.aol.com/_cqr/mcProfTokGenUrl.psp?siteId=*your_siteId*&sn=*yourSN***
3. The handler generates a self-submitting form that stores as form data the user's local profile data and the other arguments listed in Table 2.3. The form should be configured to submit the form data to the SNS server at mcProfSyncUrl or mcProfSyncUrl_S and should submit data using the POST method.

**Note**: The form should not include any profile fields that are not explicitly defined in the SNS profile data specification

(see Appendix A, SNS User Profile Schema). If your site uses profile fields not supported by SNS, make sure that you do not include them in the form.

4. The handler returns the self-submitting form to the client, which automatically redirects the client to the SNS server at mcProfSyncUrl or mcProfSyncUrl_S, sending the form data using the POST method.

#### 2.1.1.2 siteLoginUrl or siteLoginUrl_S Error Handling

Your siteLoginUrl handler must be able to handle the following error conditions:

- Token-Validation Error
- Timeout of Token Validation Request
- Unsuccessful Outcomes of the Sign-In Sequence

**Token-Validation Error**
SNS returns the Token-Validation Error when the SNS site receives a token validation request sent by siteLoginUrl, but can not validate the user's mcAuth token. In most cases, the result of a token validation should be an HTTP 200 response sent to by the SNS site directly to your site's siteLoginUrl. If the validation attempt fails, an error string is returned with a format "error=n" where "n" is one of the error codes listed in Table 2.4.

To fully support the token validation, your site's siteLoginUrl should handle the errors listed in the table below. For each error, the recommended action is described.

**Table 2.4 Token-validation error codes returned by SNS to the siteLoginUrl or siteLoginUrl_S handler**

| Error Code | Description | Appropriate Action |
|---|---|---|
| 10 | SNS internal error, couldn't load site configuration record. | Redirect to fallback registration page at your site (see Integration Engineer for details). |
| 101 | Site error, invalid IP address making request | Redirect user to your site's welcome page. Check your Partner Configuration file -- IP address of server requesting validation must be listed in siteServerIps and server must be in domain specified in siteDomain. Contact your Integration Engineer to update your Partner Configuration, if necessary. |
| 201 | User error, token expired | Redirect user to mcLoginUrl -- automatically or by presenting user with the sign-in image. |
| 202 | User error, token invalid or corrupt | Redirect to your site's welcome page. Check configuration to make sure that your site is passing the correct siteId. Contact your Integration Engineer to update your Partner Configuration, if necessary. |
| 211 | User error, user parental control restriction | Redirect to your site's welcome page. |
| Any Other | Any other token validation error code | Redirect to your site's welcome page. Check configuration to make sure that your site is passing the correct siteId. Contact your Integration Engineer to update your Partner Configuration, if necessary. |

**Timeout of Token Validation Request**
A token validation request times out when there is no response from the SNS server at mcLoginTokValUrl or mcLoginTokValUrl_S. If the validation request to the SNS server times out (receives no response), the siteLoginUrl handler should retry the request some number of times, before eventually redirecting the user to the SNS Sign-In Error page, described in "Error Pages You Must Provide."

**Unsuccessful Outcomes of the Sign-In Sequence**
In addition, your site must be able to handle unsuccessful outcomes of the sign-in sequence, specifically:

- User cancellation -- the user cancels the sign-in sequence from the SNS screens.
- Sign-in error -- the SNS site encounters an error that prevents it from successfully processing the sign-in request.

The previous general sign-in error conditions are not handled by the siteLoginUrl. Instead, they are handled by the siteLoginCancelUrl and siteLoginFailUrl, respectively. For more information, refer to "Additional Error Handlers."

#### 2.1.1.3 Auto-Detection of Authentication Status (2.6 only)

If you want your users to bypass the normal SNS sign-in page functionality, you must direct the user to the siteLoginUrl and

also pass a new query argument, errorIfUnauth, with a value of 1. (See Table 2.13 for a summary of valid query arguments.)

When errorIfUnauth is set to 1, the siteLoginUrl works as follows:

1. Checks whether the user is authenticated to the site at a level greater than or equal to the requested level.

2. If the user is authenticated:
   a. SNS processes the request as if the typical siteLoginUrl had been called. In other words, the user is seamlessly logged into the site, and the site receives the auth token (and cookies, if the site is internal).
   b. Error conditions are treated the same as in the normal SNS login flow. For example, users would see an error page if JavaScript or cookies are disabled in their browser.

3. If the user is not authenticated, siteLoginUrl redirects users to the partner's siteLoginFail URL and generates error code 217. This new error indicates that the user is not authorized at greater than or equal to the specified authLev.

4. Other SNS login errors are returned to the partner's siteLoginFail URL, as is done for the normal SNS login flow.

5. If the partner's siteLoginFail URL cannot be determined (for example, in case of a bad siteId, some other misconfiguration, or an unavailable database), then the SNS login error page is shown.

### 2.1.2 siteProfSyncUrl or siteProfSyncUrl_S Handler

The siteProfSyncUrl or siteProfSyncUrl_S handler is an application or script residing at your site that receives and processes form data sent by the SNS site. You define the actual URL associated with siteProfSyncUrl or siteProfSyncUrl_S in your site's Partner Configuration file(siteId). You develop the siteProfSyncUrl or siteProfSyncUrl_S handler by writing a new application or script or by making modifications to your existing registration processes.

If your site requires Level S authentication, your siteProfSyncUrl_S handler lets users synchronize SNS profile data with that stored locally at your site and share their profile data with your site. Define the URL associated with siteProfSyncUrl_S in your site's Partner Configuration file(siteId).

The function of the siteProfSyncUrl handler is to manage the interaction between the SNS site and your registration system, such that the user is able to share and synchronize SNS profile data with the user's local profile data stored in your registration database.

Profile synchronization begins as a part of the sign-in and local profile editing sequences. Therefore, before the siteProfSyncUrl receives any data from SNS, your site will have already:

- Redirected the user to the SNS site for sign-in
- Received and validated the user's mcAuth authentication token
- Received the user's Screen Name and SNS profile last-modified timestamp
- Determined whether the user is registering (no local record exists yet) or signing in (local profile already exists).
- Determined that local profile data, if any exists, needs to be synchronized with the user's central SNS profile data.

From this point, the general algorithm for the siteProfSyncUrl handler is as follows:

1. The siteProfSyncUrl handler receives the user's profile data, mcAuth token, and other data, sent as posted form data from the SNS site. The data received by the handler is listed in Table 2.5.

**Table 2.5 Arguments received by siteProfSyncUrl (as posted form data)**

| Argument | Description |
|---|---|
| mcAuth | Site- and user-specific authentication token generated by SNS. |
| siteState (optional) | Optional field containing arbitrary site or session data. Contains data to be subsequently returned to your siteLoginUrl or siteLoginFailUrl handlers. For example, it could contain the URL of the page from which the user clicked the SNS sign-in image. |
| SNS profile data | Updated SNS user profile data fields, transmitted via the SNS user profile form field names and values described in Appendix A, SNS User Profile Fields. If all fields are synchronized, no profile data fields will be returned |
| Site-specific profile data | Non-SNS profile data collected by SNS specifically for your application. These fields will all have names prefixed with "_p_", e.g., "_p_spam_me". |

| | |
|---|---|
| charset | The character set in which profile data is encoded. If not supplied, iso-8859-1 (Latin-1) is assumed. |
| mcLastModTs | Updated last-modified timestamp of the user's SNS profile. |
| Any updated profile data | A set of profile fields and values that represent any profile data that must be changed in the user's local profile. For new users, all user-approved profile data fields are included. For existing users, only fields with updates are included. |

2. After receiving the profile data, mcAuth token, and other data, the handler immediately attempts to validate the mcAuth token with the SNS server at mcProfTokValUrl.

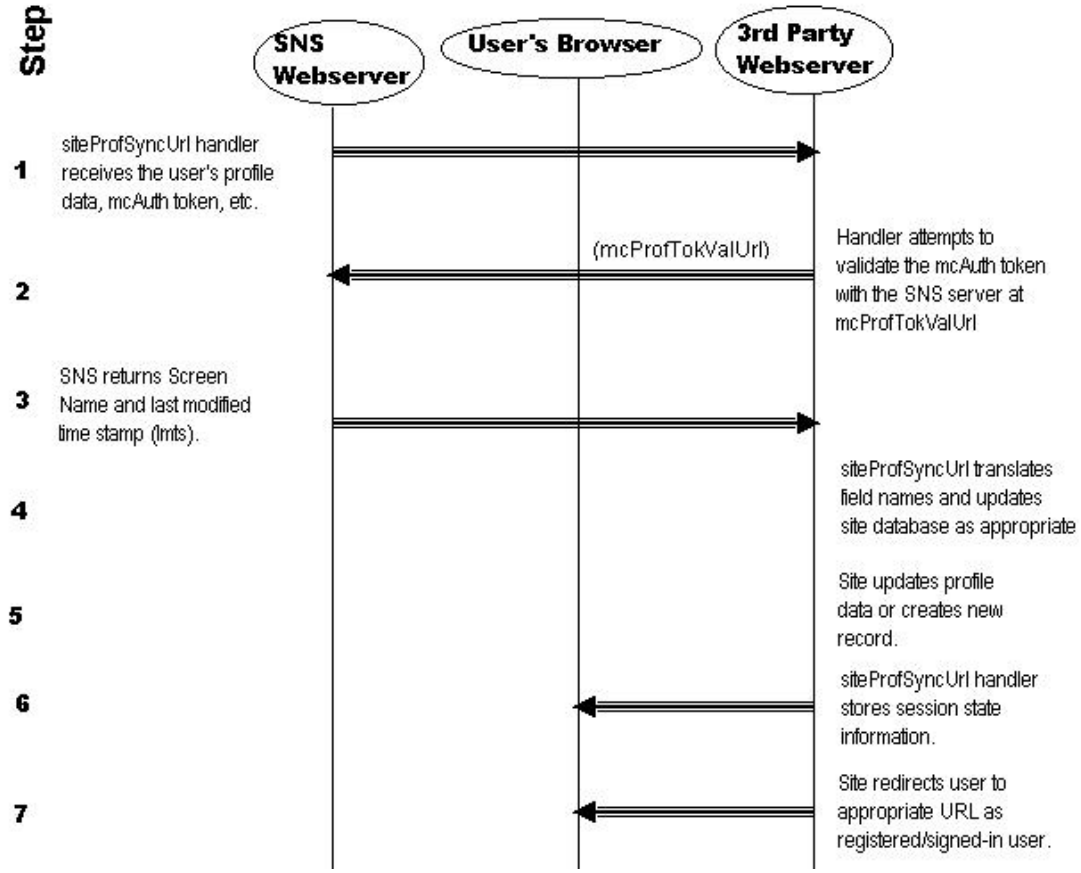


**Figure 2.2 Interaction between the siteProfSyncUrl handler and the SNS site, during profile synchronization**

To validate the token from a Level 0, 1, or 2 application user, the handler initiates a synchronous HTTP call directly to the server at mcLoginTokValUrl, passing the user's mcAuth token and your siteId as arguments, using either the POST or GET methods.

To validate the token from a Level S application user, the handler initiates a synchronous HTTPS (SSL) call directly to the server at mcLoginTokValUrl_S, passing the user's mcAuth token and your siteId as arguments, using either the POST or GET methods.

| Argument | Description |
|---|---|
| mcAuth | Site- and user-specific authentication token generated by SNS. |
| siteId | Your site's ID number, as it appears in your Partner Configuration file. |

When the SNS site receives the request, it attempts to decode and validate the mcAuth token, to make sure that it is has been sent by the correct site and has not been tampered with. To enable SNS to validate the mcAuth token, you must ensure that all of the following conditions are met:

- The validation request must be made over a direct, server-to-server connection (HTTP for Level 0, 1, or 2

authentication or HTTPS for Level S authentication).
- The validation request must come directly from a machine whose IP address you listed in the siteServerIps parameter of your siteId.
- The validation request must come directly from a machine in the domain that you specified in the siteDomain parameter of your siteId.

The server at mcProfTokValUrl returns the result of the validation attempt to the siteProfSyncUrl handler as an HTTP 200 response. It includes the validation result as the body of the response.

- If SNS successfully validated the user's mcAuth token, the response includes this body content: "sn=*ScreenName*&lmts=*lmts*&disSN=*displayName*&authLev=*authLev*"

  The query parameters are described below:

| Parameter | Description |
|---|---|
| sn | Defines *ScreenName*, which is the unformatted screen name of the user. |
| lmts | Defines the last-modified timestamp, or lmts. *ltms* is an integer value that denotes the modification date of the user's profile stored on SNS. Possible values are:<br>▪ A positive integer representing the last modification date of the user's profile.<br>▪ Zero (0) if the user does not yet have profile data with SNS.<br>▪ Minus 1 (-1) if SNS is temporarily unable to access the user's timestamp. |
| disSN | Defines the formatted screen name; that is, the name with optional spaces and capitalization. |
| authLev | Defines one or more authorization levels that indicate the user's current authorization. Possible values are 0, 1, 2, or S, as well as a comma-separated list of these values. |

  **Sample string:** "sn=johnsmith&lmts=967136978&disSN=John Smith&authLev=0,1"

- If SNS received the request but could not validate the token, the response includes this body content:"error=n" where "n" is one of the error codes listed in Table 2.10.

In this case, the handler should redirect the user to your site's SNS Sign-In Error Page, as described in "Error Pages You Must Provide."

3. Assuming a successful mcAuth token validation result, the handler obtains the Screen Name, Display Name, last-modified timestamp, and authentication level from the response.

4. Partners can choose to drop an application-specific cookie for that particular authentication level (the one returned in the authLev parameter). For example, if the returned authLev is 0, you can drop a permanent cookie, thereby allowing your site to recognize the user upon a repeat visit. The permanent cookie lets you avoid redirecting users back to SNS. (SNS would simply redirect the "remembered" user back to your site with a level 0 authentication.)

   Similarly, a partner can drop a timed-out cookie if the authLev is 2. This cookie time-out must match the timeout specified in the siteId. After the cookie times out, the user could then be directed back to SNS for re-authentication. **Note:** These cookies must be deleted when the user logs out.

5. The siteProfSyncUrl or siteProfSyncUrl_S handler next performs any translation of the field names and values of the updated profile data as appropriate, to make sure that they integrate properly with the profile schema at your site.

   Depending on your site's namespace policy, the handler might need to apply a namespace mapping to the Screen Name in order to obtain a valid local user ID. For example, if your namespace policy is to add the suffix ".sn" to all SNS Screen Names, then the handler should map the Screen Name "ScreenName" to the local user ID "ScreenName.sn" before querying the database.

6. The handler writes the updated profile data to the user's record in the registration database. If the user is new, a new record is created at this time unless you are using your site-specific registration page. When writing to the user record, the handler should also update the last-modified timestamp entry in the user's record, setting it to the value of mcLastModTs, received in Step 1.

7. The siteProfSyncUrl handler stores session state information in a way that is appropriate for your site's registration system (cookies, for example). The session state data should include:

   - The user's local user ID (but not not the user's Screen Name)

- A marker of some kind that indicates that the user signed in through SNS (versus signing in through your site's registration system).

**Note**: This step only applies if the user is new and your site doesn't use a site-specific registration page. If these conditions don't apply the session information is set at login or after site-specific information is gathered.

8. As the concluding action, the handler should redirect the user to the appropriate URL on your site, as a registered, signed-in user.

**Note**: If the siteProfPush flag is set to "Y" in the siteId, the new user is directed to the profSyncUrl or profSyncUrl_S.

#### 2.1.2.1 Option: Additional Site-Specific Registration Sequence (Flexible Registration System)

If the registration system at your site requires user profile information in addition to that provided for in the SNS profile data schema, you can specify those fields by using the the Site Specific Fields feature of the Partner Site Configuration Editor. The fields you specify are displayed in the bottom section of a two-section user registration page. The top section of this registration page collects and displays SNS user profile data. The bottom section collects and displays site-specific user profile data.

When a user registers, your site requests the user's profile data from SNS through a profile synchronization, then validates the user's mcAuth token (as described in the standard siteProfSyncUrl handler algorithm). However, instead of immediately creating a new user record based on the received profile data, the handler feeds the data into a SNS-specific version of your registration page, populating the fields on the page with values from the SNS profile. Any additional profile fields or preference settings on the page are left blank, to be filled in by the user and then submitted.

When the user submits the registration page, the handler evaluates the form data as follows:

- Validates SNS user profile data.
- Evaluates your site-specific data to determine that required fields are populated.

The handler writes the new user record to the registration database and initiates a profile synchronization if needed. Your site is responsible for editing and validating site-specific data.

#### 2.1.2.2 Algorithm for Additional Site-Specific Registration Sequence

In the following section, the secure handlers are noted by the ending "_S" added to the names of the regular handlers.

The algorithm that supports site-specific registration follows the same first three steps as the siteProfSyncUrl[_S] handler. Those first three steps are summarized in the following algorithm. Refer to Steps 1 through 3 in "siteProfSyncUrl or siteProfSyncUrl_S Handler" for details.

1. The siteProfSyncUrl or siteProfSyncUrl_S handler receives the user's profile data, mcAuth token, and other data, sent as posted form data from the SNS site. For more information refer to Step 1 of siteProfSyncUrl or siteProfSyncUrl_S Handler.

2. After receiving the profile data, mcAuth token, and other data, the handler immediately attempts to validate the mcAuth token with the SNS server at mcProfTokValUrl or mcProfTokValUrl_S. For more information refer to Step 2 of siteProfSyncUrl or siteProfSyncUrl_S Handler.

3. Assuming a successful mcAuth token validation result, the handler obtains the Screen Name, last-modified timestamp, and authentication level from the response. For more information refer to Step 3 of siteProfSyncUrl or siteProfSyncUrl_S Handler.

4. The handler translates profile field names and values as appropriate, to make sure that the user's SNS profile data integrates properly with the profile schema at your site.
   For example, if your site stores the user's last name in a field called name_surname, then the handler should translate the SNS profile field user_name_last to name_surname.

5. SNS generates a SNS-specific version of your site's registration page, populating the page's forms inputs with the user's SNS profile data obtained in Step 4, above.

   The SNS-specific version of your site's registration page differs from the standard registration page of your site in that

it:

- Contains a welcome message for SNS users
- Omits the fields for user name and password. (Your site should not let users make changes to their Screen Names and passwords.)

The handler stores the user's mcAuth token and the profile's last-modified timestamp for use in the next step, as hidden inputs in the registration page, by writing them to a cookie, or storing them in some other way.

6. Once the user has filled out and submitted the registration page, the handler checks the registration form input to make sure that the user has provided valid data for all profile fields required by your site. The handler also obtains the user's mcAuth token from the form data (or from another location, as determined in the previous step. If the profile data submitted by the user is incomplete or invalid, the handler returns the page to the user with a specific indication of the problem.
7. The handler validates the mcAuth token obtaining the user's Screen Name in return.
8. Assuming a successful mcAuth token validation response, the handler should parse the body content of the response to obtain the Screen Name, the profile last-modified timestamp, and the authentication level.
9. The handler generates a local user ID for the user, based on the user's Screen Name and your site's namespace policy. Refer to "How Will You Handle Namespace Integration?" for an overview of namespace considerations.
10. The handler creates a new record for the user in the registration database, using the profile data from the SNS-specific version of your site's registration page.When writing to the user record, the handler should also update the last-modified timestamp entry in the user's record, setting it to the value of mcLastModTs.
11. After writing to the new user record, the site-specific registration page stores session state information in the way that is appropriate for your registration system (for example, cookies). The session state data should include:

    - The user's local user ID (but not the user's Screen Name)
    - A marker of some kind that indicates that the user signed in through SNS (versus signing in through your site's registration system).

    **Note**: If you plan to store session data in cookies, store the user's local user ID in one cookie (using the cookie-setting mechanism of your registration system), and store the SNS marker in a different cookie.

12. To ensure that any locally modified profile data can be copied back to the user's SNS profile, the handler initiates a profile synchronization (for existing user), as described in "To Initiate Profile Synchronization for an Existing User."

#### 2.1.2.3 siteProfSyncUrl or siteProfSyncUrl_S Error Handling

Your siteProfSyncUrl or siteProfSyncUrl_S handler must be able to handle these error conditions:

- Timeout of profile synchronization request
- Token validation error
- Timeout of token validation request
- Unsuccessful outcomes of the profile synchronization sequence

These conditions are discussed in the following sub-sections. For additional information, refer to "Failure and Cancellation Error Handlers."

**Timeout of Profile Synchronization Request**
In the following section, the secure handlers are noted by the ending "_S" added to the names of the regular handlers.

If there is no response from the SNS server at mcProfSyncUrl or mcProfSyncUrl_S, the partner handler should timeout and redirect the user to an error page or to another partner-specified page that complies with the partner flow.

**Token Validation Error**
A token validation error occurs when siteProfSyncUrl or siteProfSyncUrl_S could not validate the user's mcAuth token. In most cases, the result of a token-validation sequence should be an HTTP 200 response sent to by the SNS site directly to your site's siteProfSyncUrl or siteProfSyncUrl_S. If the validation attempt was unsuccessful, the body of the response includes an explanatory error code of this format "error=n" where n is one of the error codes listed in Table 2.6.

**Table 2.6 Token-validation error codes returned by SNS to siteProfSyncUrl[_S] handler**

| Error Code | Description | Appropriate Action |
|---|---|---|
| 10 | SNS internal error, couldn't load site configuration record. | Redirect to fallback registration page at your site (see Integration Engineer for details). |
| 101 | Site error, invalid IP address making request | Redirect user to your site's welcome page. Check your Partner Configuration file -- IP address of server requesting validation must be listed in siteServerIps and server must be in domain specified in siteDomain. Contact your Integration Engineer to update your Partner Configuration, if necessary. |
| 201 | User error, token expired | Redirect user to mcLoginUrl -- automatically or by presenting user with the sign-in image. |
| 202 | User error, token invalid or corrupt | Redirect to your site's welcome page. Check configuration to make sure that your site is passing the correct siteId. Contact your Integration Engineer to update your Partner Configuration, if necessary. |
| 211 | User error, user parental control restriction | Redirect to your site's welcome page. |
| Any Other | Any other token-validation error codes returned by SNS to siteProfSyncUrl handler | Redirect to your site's welcome page. Check configuration to make sure that your site is passing the correct siteId. Contact your Integration Engineer to update your Partner Configuration, if necessary. |

**Timeout of Token Validation Request**
If there is no response from the SNS server at mcProfTokValUrl, that is, if the validation request to the SNS server times out, the siteProfSyncUrl or siteProfSyncUrl_S handler should retry the request some number of times, before eventually redirecting the user to the SNS Sign-In Error page, described in "Error Pages You Must Provide."

**Unsuccessful Outcomes of the Profile Synchronization Sequence**
Your site must be able to handle the following unsuccessful outcomes of the profile synchronization sequence:

- User cancellation of profile synchronization -- the user cancels the sharing or synchronization of profile data from the SNS screens. In this case, the SNS site redirects the user to your site's siteProfSyncCancelUrl or siteProfSyncCancelUrl_S. For more information, refer to "siteProfSyncCancelUrl or siteProfSyncCancelUrl_S Handler."
- Profile synchronization error -- the SNS site encountered an error that prevented it from successfully processing your profile synchronization request. In this case, the SNS site redirects the user to your site's siteProfSyncFailUrl or siteProfSyncFailUrl_S, posting an error code as form data. For more information, refer to "siteProfSyncFailUrl or siteProfSyncFailUrl_S Handler."

## 2.1.3 siteLogoutUrl or siteLogoutUrl_S Handler

The siteLogoutUrl or siteLogoutUrl_S handler is an application or script residing at your site that receives and handles a request from the SNS site to sign a SNS user out of your site. You define the URLs associated with siteLogoutUrl and/or siteLogoutUrl_S in your site's Partner Configuration file. You develop the siteLogoutUrl handler by writing a new application or script or by making modifications to your existing registration processes.

The siteLogoutUrl_S is the URL to which a user is directed if your site requires Level S authentication.

The sequence of events that will accomplish user sign-out is illustrated below. SNS logout will effectively log the user out of the SNS system as well as some or all (per the user's direction) of the SNS-enabled sites the user has visited during the SNS session.

The function of the siteLogoutUrl handler is to manage the interaction between the SNS site and your site, such that the user is able to sign out of your site when signing out of SNS. When the user signs out of SNS, the service notifies the siteLogoutUrl handler at your site, which erases any local session cookies that your site has set for the user.

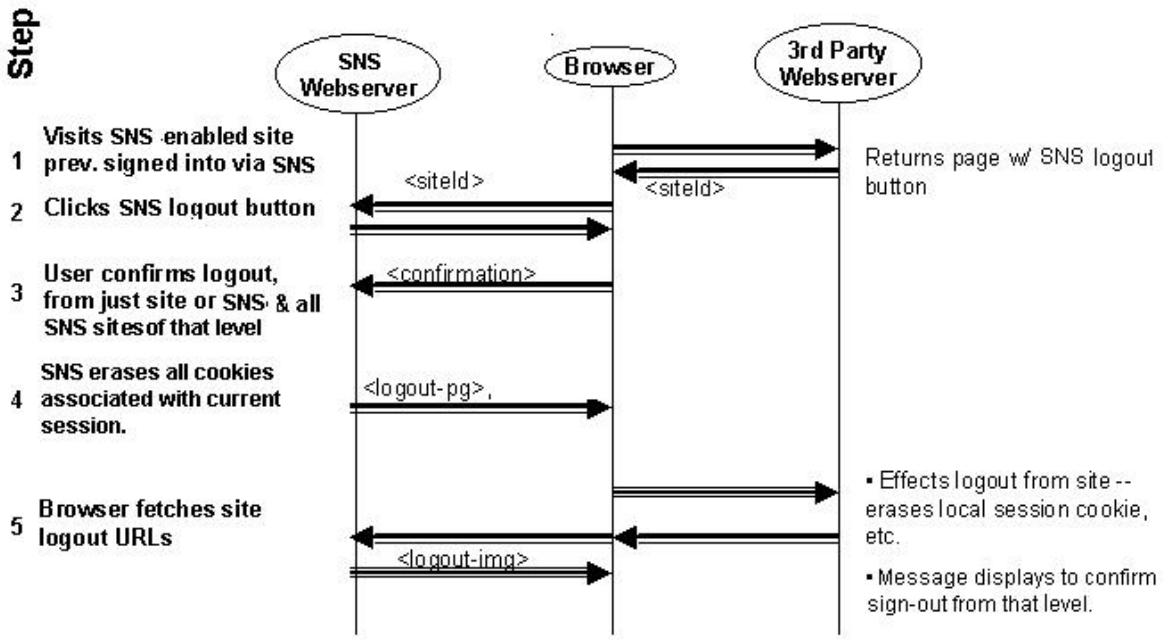


**Figure 2.3 Interaction between SNS site and siteLogoutUrl handler, during logout**

The sign-out sequence can begin in one of two ways: The user clicks the SNS sign-out image on your site or the user closes the browser. Your site's sign out behavior differs depending on your authentication level.

- When the user clicks the SNS sign-out image that you have placed on your site, the user is linked to the SNS site, where the user signs out of your site. If your site is configured for:
    - Level 0: Authentication terminates only for your application. It will also end their session in Level 1, 2, and S upon sign-out.
    - Level 1: Session authentication terminates across all sites. Level 2 and Level S secure key authentication also terminates.
    - Level 2: Level 1, 2, and S authentication terminates across all sites.
    - Level S: The user is given the option to sign out completely. If the user chooses to sign out completely, then authentications at Level 1, 2, and S sites terminates. If not, the user's session is still active in Level 0, 1, and 2 sites. If your site offers Level 0 authentication, then this authentication terminates.
- Closing the browser may or may not sign the user out of the application. This, too, depends on authentication levels.
    - Level 0: Level 0 authentication terminates only for that application.
    - Level 1: Session authentication terminates across all SNS sites.
    - Level 2: Level 1, 2, and S authentication terminates across all sites.
    - Level S: Level S authentication terminates across all sites, except where the user has chosen to be remembered.
- In either of these cases, the action of the siteLogoutUrl or siteLogoutUrl_S handler is the same. Before the siteLogoutUrl or siteLogoutUrl_S receives any data from SNS, the user will have already:
    - Signed in to your site, during the user's current browser session.
    - Chosen to sign out of SNS from your site.
    - Initiated the sign-out sequence.

Once the user has initiated the sign-out sequence, the SNS site sends an HTTP request to your site's siteLogoutUrl or an HTTPS request to your site's siteLogoutUrl_S.

**Important:**
If your site supports Level 0 or Level 2 authentication, your sign-out URL must explicitly include the parameter authLev=0.

For example, suppose the sign-in URL is the following (line-breaks are for readability only):

```
http://vltest-nes.web.aol.com/_cqr/login/
     login.psp?siteId=mysiteDevs&siteState=mysiteState&authLev=0
```

In this case, the corresponding sign-out URL must be:

```
http://vltest-nes.web.aol.com/_cqr/logout/
     mcLogout.tmpl?siteId=mysiteDevs&authLev=0
```

If your sign-out URL omits the authLev=0 parameter, a user will not be able to sign-in later with a different screen name, because your site will remember the user's previous screen name.

**Table 2.7 mcLogoutUrl[_S] Arguments for Concluding a Screen Name Service Session**

| Argument | Description |
|---|---|
| siteId | Your site's Id, as registered with SNS. |
| siteState (optional) | Optional field containing arbitrary site or session data. Contains data to be subsequently returned to your siteLoginUrl or siteLoginFailUrl handlers. For example, it could contain the URL of the page from which the user clicked the SNS sign-in image. |
| authLevel | User authentication level. Possible values are: "0", "1", "2" for mcLogoutUrl (HTTP), "S" for mcLogoutUrl_S (HTTPS). If not provided, this value defaults to "1." |
| errorIfUnauth (optional) | **Available in SNS 2.6 only.** A Boolean specifying whether to treat unauthenticated login as an error. If set to 1, unauthenticated users are redirected to the site's siteLoginFailUrl (with error code 217) instead of being shown a login form. Authenticated users are logged in as normal. Default is 0. |

From this point, the general algorithm for the siteLogoutUrl handler is as follows:

1. The siteLogoutUrl handler receives the HTTP request from the SNS site.
2. The handler modifies the user's session state-state data stored for the user, such that the user is formally signed out of your site.
3. The handler redirects to the mcLogoutSuccImUrl.

If your site stores session state in cookies, the siteLogoutUrl handler should erase all session cookies set by your site. For example, if your site sets two cookies -- one containing the SNS marker and another containing your site's normal sign-in cookie -- the handler should make sure that both cookies are erased.

#### 2.1.3.1 siteLogoutUrl Error Handling

The siteLogoutFailUrl handler is used in the event that cookies are disabled for a user who is trying to logout.

## 2.2 Local Profile Editing Handler

You can offer SNS users the same capability to edit their local profile data at your site as you offer to other users. To support SNS users, extend your existing profile editing handler so that it includes these functions:

- When writing the edited profile data to the user record, the handler should set the user's siteProfMod flag to "true" (siteProfMod=1).
- After writing the updated profile data to the user record, the handler should initiate a profile synchronization (for existing user), as described in "To Initiating a Profile Synchronization for an Existing User". This ensures that any changes the user made to profile data can be copied to the user's SNS profile.

## 2.3 Failure and Cancellation Error Handlers

Several handlers are available to expose the error codes generated by SNS. You'll want to use these handlers to process service errors encountered during login, during profile synchronization, or due to other error conditions.

**Table 2.8 Additional Error Handlers**

| Description | Appropriate Action |
|---|---|
| siteLoginFailUrl | SNS redirects the user to this URL when internal SNS errors prevent the successful sign-in of the user. |
| siteLoginFailUrl_S | SNS redirects the user to this URL when internal SNS errors prevent the successful sign-in of the user to a site requiring Level S authentication. |
| siteLoginCancelUrl | SNS redirects the user to this URL when the user cancels the sign-in sequence (by not approving the transfer of the user's Screen Name to your site). |
| siteLoginCancelUrl_S | SNS redirects the user to this URL when the user cancels the sign-in sequence into a site requiring Level S authentication (by not approving the transfer of the user's Screen Name to your site). |
| siteProfSyncFailUrl | SNS redirects the user to this URL when internal SNS errors prevent a profile synchronization. |
| siteProfSyncFailUrl_S | SNS redirects the user to this URL when internal SNS errors prevent a profile synchronization at a site requiring Level S authentication. |
| siteProfSyncCancelUrl | SNS redirects the user to this URL when the user cancels a profile synchronization. |
| siteProfSyncCancelUrl_S | SNS redirects the user to this URL when the user cancels a profile synchronization at a site requiring Level S authentication. |
| siteLogoutFailUrl | SNS redirects the user to this URL upon failure of an SNS logout request. |
| siteLogoutFailUrl_S | SNS redirects the user to this URL upon failure of a request to logout from an SNS site that requires Level S authentication. |

You define the actual URL associated with the error handlers in your site's Partner Configuration file. You develop the handlers by writing an application or script or by making modifications to your existing registration processes.

In the sections below, we provide more information about each error handler. The secure handlers are noted by adding the ending "[_S]" to the names of the regular handlers.

### 2.3.1 siteLoginFailUrl or siteLoginFailUrl_S Handler

The user is redirected to the siteLoginFailUrl[_S] handler upon failure of a Screen Name Service logout request.

**Table 2.9 Sign-in error codes returned by SNS to the siteLoginFailUrl[_S] handler**

| Error Code | Description | Appropriate Action |
|---|---|---|
| 10 | SNS internal error, couldn't load site configuration record. | Redirect to fallback registration page at your site (contact your Integration Engineer for details). |
| 211 | User error, user parental control restriction | Redirect to your site's welcome page. |
| Any Other | Any other sign-in error code | Redirect to your site's welcome page. Check configuration to make sure that your site is passing the correct siteId. Contact your Integration Engineer to update your Partner Configuration, if necessary. |

### 2.3.2 siteLoginCancelUrl or siteLoginCancelUrl_S Handler

As mentioned previously, the user must approve the transfer of his or her Screen Name to your site during the sign-in sequence. In turn, your site uses this as the basis for registering or signing in the user at your site. If the user chooses not to transfer his or her Screen Name to your site, the screens presented by the SNS site let the user cancel the sign-in sequence.

When the user cancels the sign-in sequence through the SNS screens, the SNS site redirects the user to your site's siteLoginCancelUrl or siteLoginCancelUrl_S handler.

To support user cancellation of the sign-in sequence, provide a siteLoginCancelUrl or siteLoginCancelUrl_S that redirects registering users (users with no record in your registration database) to your site's standard registration page, and redirects existing users to your welcome page or other page.

### 2.3.3 siteProfSyncFailUrl or siteProfSyncFailUrl_S Handler

If the SNS site encounters an error that prevents it from processing your site's request for a profile synchronization, it redirects the user to your site's siteProfSyncFailUrl and supplies an error code as posted form data.

To fully support profile synchronization, provide a siteProfSyncFailUrl or siteProfSyncFailUrl_S handler that receives the error code and takes the appropriate action specified in Table 2.10 below.

**Table 2.10 Profile synchronization error codes returned by SNS to siteProfSyncFailUrl[_S]**

| Error Code | Description | Appropriate Action |
|---|---|---|
| 10 | SNS internal error, couldn't load site configuration record. | Redirect to fallback registration page at your site (see Integration Engineer for details). |
| 110 | Site error, invalid or missing API arguments (for example, siteProfMod or mcProfMod) | Make sure that your self-submitting form supplies the required arguments, as described in Table 2.3.<br><br>Redirect user to your site's welcome page or error page. |
| 111 | Site error, invalid profile data input from site (for example, invalid country code) | Make sure that your self-submitting form submits only profile fields and values defined in "SNS User Profile Schema".<br><br>Redirect user to your site's welcome page or an error page. |
| 210 | User error, user not currently signed in to SNS | Redirect user to your site's welcome page or an error page. |
| 211 | User error, user parental control restriction | Redirect to your site's welcome page. |
| Any Other | Any other profile synchronization error | Redirect to your site's welcome page. Check configuration to make sure that your site is passing the correct siteId. Contact your Integration Engineer to update your Partner Configuration, if necessary. |

### 2.3.4 siteProfSyncCancelUrl or siteProfSyncCancelUrl_S Handler

As mentioned previously, the user must approve the transfer of SNS profile data to your site during the profile synchronization sequence. If the user chooses not to transfer profile information to your site, the screens presented by the SNS site let the user cancel the profile synchronization sequence.

If the user cancels the profile synchronization sequence through the SNS screens, the SNS site will redirect the user to your site's siteProfSyncCancelUrl.

If your site requires Level S authentication, the SNS site will redirect the user to your site's siteProfSyncCancelUrl_S, and supply an error code as posted form data.

To fully support profile synchronization, provide a siteProfSyncCancelUrl or siteProfSyncCancelUrl_S handler that redirects registering users (users with no record in your registration database) to your site's standard registration page, and redirects existing users to your site's welcome page or other page.

### 2.3.5 siteLogoutFailUrl or siteLogoutFailUrl_S Handler

If a user attempts to sign out of your site through SNS, but is not currently signed in to the service, the SNS site will redirect the user to your site's siteLogoutFailUrl, also supplying an error code as posted form data.

If your site requires Level S authentication, the SNS site will redirect the user to your site's siteLogoutFailUrl_S, and supply an error code as posted form data.

To fully support the logout sequence, provide a siteLogoutFailUrl[_S] handler that receives the error code and takes the appropriate action specified in Table 2.11 below.

**Table 2.11 Sign-out error codes returned by SNS to the siteLogoutFailUrl[_S] handler**

| Error Code | Description | Appropriate Action |
|---|---|---|
| 210 | User error, user not currently signed in to SNS. | Redirect user to your "welcome" page or other page. |

| | | |
|---|---|---|
| Any Other | Any other sign-out error code | Redirect to your site's welcome page. Check configuration to make sure that your site is passing the correct siteId. Contact your Integration Engineer to update your Partner Configuration, if necessary. |

## 2.4 Error Pages You Must Provide

To let users know about error conditions encountered while signing in or out of your site through SNS, your site should provide the error pages described below:

**Table 2.12 Error Pages**

| Error Page | Description |
|---|---|
| SNS sign-in error page | Your site should display a sign-in error page whenever a SNS user fails to successfully sign to the service. The page should be displayed (or generated) by the siteLoginUrl, siteLoginUrl_S, siteLoginFailUrl, or siteLoginFailUrl_S handler, in error conditions. |
| Registration error page | Your site should display a registration error page whenever a SNS user fails to successfully register at your site. The page would be displayed (or generated) by the siteProfSyncUrl, siteProfSyncUrl_S, siteProfSyncFailUrl, or siteProfSyncFailUrl_S handler, in error conditions. |

## 2.5 Adding Timestamp to Your Local Records

To enable your SNS handlers to track the synchronization status of **local** profile data, use the local SNS profile last-modified timestamp. This timestamp is an SNS-specific entry, and it designates the latest last-modified timestamp of the user's SNS profile, as obtained during the sign-in or profile synchronization sequences. You'll need to add this timestamp as a database entry in the local records of SNS users who register at your site.

## 2.6 Placing the SNS Images on Your Site

To enable users to sign in and sign out of your site through SNS, you can place special linked images on your site's pages. Although these images are hosted from the SNS site, you must place the appropriate HTML for the images in your pages, ensuring that the image SRC and HREF attributes point to the correct URLs, as defined in the SNS Configuration file. If you want, you can have your site dynamically generate and configure these images on your pages, based on the user context.

The images are located in Appendix C, Images for SNS Localization.

- The HTML code for placing the sign-in image is:

  ```
  <A HREF=mcLoginUrl><IMG SRC=mcLoginImgUrl></A>
  ```

- The HTML code for placing the sign-out image is:

  ```
  <A HREF=mcLogoutUrl><IMG SRC=mcLoginImgUrl></A>
  ```

In both cases, the actual values for mcLoginUrl, mcLoginImgUrl, mcLogoutUrl, and mcLogoutImgUrl are specified in Table 3.1. The link to the mcLoginUrl can include the URL arguments listed in Table 2.13 below. The siteID is required, but other arguments are optional. However, you must submit these arguments using either the GET or POST method.

**Table 2.13 Arguments you must submit to mcLoginUrl**

| Argument | Description |
|---|---|
| siteID | Your site's ID number, as registered with SNS. While you are developing your SNS application, this siteId points to your development site. When your site goes into production, it points to your production site. |
| siteState (optional) | Optional field containing arbitrary site or session data. Contains data to be subsequently returned to your siteLoginUrl[_S] or siteLoginFailUrl[_S] handlers. For example, the siteState field could contain the URL of the page at which the user clicked on the SNS sign-in image. |
| createSn (optional) | Boolean ("0" = false, "1" = true) value indicating whether your site wishes SNS to bypass the normal screenname / password login page and go directly to the create-a-screenname page for unauthenticated users. Defaults to 0 (user will go first to login page). |

| | |
|---|---|
| authLev (optional) | User authentication level. Possible values are: "0", "1", "2" for mcLoginUrl (HTTP), "S" for mcLoginUrl_S (HTTPS). If not provided, this value defaults to "1." |
| errorIfUnauth (optional) | **Available in SNS 2.6 only.** A Boolean specifying whether to treat unauthenticated login as an error. If set to 1, unauthenticated users are redirected to the site's siteLoginFailUrl (with error code 217) instead of being shown a login form. Authenticated users are logged in as normal. Default is 0. |

For users not currently signed in to your site, you'll need to display the sign-in image. For users who are already signed in, you'll need to display the sign-out image. Minimally, you should place the SNS sign-in and sign-out images on your site's registration page. Optionally, you might also want to place the images anywhere you have a link to your registration page. This expanded placement benefits your site by bringing more users into your registration system quickly and easily.

To meet this requirement, your site must be able to:

- Dynamically establish the user context, which entails determining if the user is currently signed in to your site and, if so, whether the user is signed in through SNS
- Dynamically insert the proper image SRC and HREF values (URLs), based on the user context.

Table 2.14 presents three techniques to consider for dynamically determining the user context and for rendering the appropriate HTML:

**Table 2.14 Techniques for dynamically determining user context**

| Technique | Description |
|---|---|
| **JavaScript** | Use JavaScript to write a simple script that:<br><br>1. Establishes context by examining the cookies set by your site or other session-state data<br>2. Writes the correct image SRC and HREF into the HTML document.<br><br>Make sure you provide an alternate way of establishing the context of any users whose browsers do not support JavaScript. |
| **CGI** | Define local CGI scripts as the values for image SRC and HREF. Then have the CGI scripts determine the user context and generate the proper URLs. For example, your pages could include this static HTML:<br><br>`p<A HREF="localcgi1"><IMG SRC="localcgi2></A>`<br><br>where"localcgi1" and "localcgi2" would determine the user context and generate the proper URLs. |
| **Server-side Page Generation** | Use server-side dynamic page generation by employing a dynamic page-generation engine (JSP, ASP, CGI, and so on) to implement the logic described for the JavaScript method discussed above. |

To determine the proper image SRC and HREF for each user context, refer to Table 2.15 below.

**Table 2.15 User contexts and appropriate configuration parameters for the sign-in and sign-out images.**

| User Context | Description | Image SRC Attribute Points To... | Link HREF Attribute Points To... |
|---|---|---|---|
| User not signed in through SNS or through your registration system. | User is not currently signed in. | mcLoginImgUrl | mcLoginUrl |
| User is signed in to your site through SNS. | User has an active, SNS-initiated session at your site. | mcLogoutImgUrl | mcLogoutUrl |
| User is signed in to your site through your registration system only. | User has an active session at your site that was initiated independently of SNS. | Not applicable (Omit image and hyperlink) | Not applicable (Omit image and hyperlink) |

Minimally, you should place the SNS sign-in and sign-out images on your site's registration page. Optionally, you might also want to place the images anywhere you have a link to your registration page. This expanded placement benefits your site by bringing more users into your registration system quickly and easily.

## 2.7 Flexible UI Template and Parameters

In Section 1.9, Flexible UI and Partner Cobranding, we gave an overview of the SNS Flexible UI options. Now, in Section 2.7, we cover the implementation of the Flexible UI for sign-in and registration pages. Refer to the Flexible UI Style Guide for detailed UI options and flows.

To take advantage of the Flexible UI, partners must provide a template URL to be wrapped around the SNS modules. The modules provide sign-in and registration functionality. The Flexible UI Style Guide contains visual mock-ups of the modules. The template is hosted at the partner site and can be written in HTML, ASP, JSP, Perl, and so on. The template is fetched and cached by the SNS servers and presented to the user in real time. The cache timeout is configurable in the siteId.

This section covers the different kinds of data you configure in your siteId to implement the Flexible UI on your site. These are:

- Template URL (Section 2.7.1)
- User-Specific variables (Section 2.7.2)
- Module Contexts (Section 2.7.3)
- Module Colors (Section 2.7.4)
- Cache Timeouts (Section 2.7.5)

This section also contains the following topics:

- Error Handling (Section 2.7.6) and
- Tips for Implementing Flex UI (Section 2.7.7)

**Note**: These parameters are configurable per siteId, not per domain or per site. This means that if you use three different siteIds (for example, to handle 3 different lang-locale combinations), then you need to configure all three siteIds with the corresponding URLs and values.

## 2.7.1 Template URL

The partner co-branded template is stored at the partner site at the URL described under Flexible Cobranding Configuration. When the user enters a cobranded page, SNS performs the following actions:

1. Fetches this template from the partner's server.
2. Inserts the appropriate SNS Module (for sign-in, registration, and so on).
3. Serves the resulting page.

SNS partners may provide either a static or dynamic HTML URL for their Flexible UI template. Partners can use any server-side scripts/language including JSP, ASP, Perl, CGI, and HTML to build the template for the login, registration and logout pages. Partners have complete control to generate one or more dynamic pages based on the user specific variables passed to the template by SNS.

## 2.7.2 User-Specific Variables

The HTML returned by the partner's template URL can be static or dynamic. Partners have the option of generating dynamic HTML based on the parameters outlined in Table 2.16 below. These parameters can be passed to the template if flagged in the Partner Site Configuration Editor (see Flexible Cobranding Configuration for descriptions of the Editor fields).

**Table 2.16 User-Specific Variables**

| User Specific Information | Location (Query String or Header) | Variable/Header Name | Format | Example |
|---|---|---|---|---|
| User's Lang-Locale | Query String | langLoc | lang-locale | langLoc=en-us / fr-ca / ja-jp |
| User Agent | Header | User-Agent | HTTP user agent header from browser | User-Agent=Netscape/IE/AOL Client |
| siteId | Query String | siteId | SNS SiteId | siteId=aolcom |
| siteState | Query String | siteState | url encoded string | siteState=test |
| Main Context | Query String | mcCtx | string | mcCtx=pw |

| | | | | |
|---|---|---|---|---|
| Advanced (sub)Context | Query String | mcCtx2 | string | mcCtx2=forgot.sent, mcCtx=create.sugs |

- The **lang-locale** parameter is passed from different places, depending on which pages are involved:
  - For pages involving the login sequence, the language encoding scheme is based on the lang-locale of the site and is therefore fetched from its site configuration.
  - For pages involving the registration of first-time users (users are signed in but don't have a profile), the language encoding scheme is based on the site's lang-locale.
  - For pages involving the update of a user profile (users are signed in and registered), the language encoding scheme is based on the lang-locale in which the user's profile is stored.
- The **User Agent** is passed from the user's browser header.
- The **siteId** is your site's identification, as registered with SNS.
- The **siteState** is arbitrary, URL-encoded partner site state data carried on each page the user visits during a sequence of login/registration/logout transactions.
- **Main Context** and **Advanced (sub)Context** are discussed below under Module Contexts.

**Notes**: The siteState may contain only ASCII characters. SNS imposes no limit on its size, but you should consider which browsers your users use most and the restrictions those browsers impose on the size of the POST and GET data. You can store as much data as you like in the siteState as long as it remains within the HTTP POST/GET limits. Spaces are not allowed in the siteState.

## 2.7.3 Module Contexts

SNS contains several modules that include screen name creation, authentication at different levels, registration, and profile synchronization. Partners have the liberty to use one or many templates to encompass these modules.

### 2.7.3.1 Main Context

SNS passes the six Main Context values detailed below back to the template. Click on the numbers in the Reference Modules column to view sample images.

**Table 2.17 Main Context Values**

| Main Context value | Description | Ref. Modules for each Main Context (Grouped) |
|---|---|---|
| sn | The sn context contains modules pertinent to creating a screen name | 1, 2, 3, 4 |
| pw | The pw context contains modules pertinent to password verification. | 1, 2, 3, 4, 5, 6, 7 |
| mcLogin | The mcLogin context contains modules pertinent to login confirmation. | 1 |
| sKey | The sKey context contains modules pertinent to security key creation and verification. | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 (Images 11 and 12 might be deprecated.), 13, 14 |
| profReg | The profReg context contains modules pertinent to user registration | 1, 2, 3, 4, 5, 6, 7, 8, 9 (image unavailable), 10, 11, 12 (image unavailable), 13 |
| profSync | The profSync context contains modules pertinent to profile synchronization | 1, 2, 3 |

For example, suppose you specify the siteFlexUiTmplUrl, http://www.aol.com/globaltemplate.jsp. Then SNS passes the following mcCtx values to that URL:

```
mcCtx=[sn][pw][mcLogin][sKey][profReg][profSync]
```

Based on this context, you can select (generate) a unique HTML page and pass it back to the SNS server. Refer to the Flexible UI Style Guide for further visuals.

**Note**: If desired, partners can choose one template that fits all contexts and avoid any subgrouping.

### 2.7.3.2 Advanced (sub)Context (Optional)

Sometimes a partner's application requires more template granularity than that provided by the six categories specified under Main Context. If this is the case, the partner can check for advanced context (mcCtx2) parameters along with the main context (mcCtx) parameters.

Table 2.18 below summarizes the available subcontexts for each main context. Click the links in the righthand column to view an example of the associated module. The links point to the images associated with the parameter value.

**Table 2.18 Advanced (sub)Context Values (and associated images)**

| Advanced (sub)Context category | Advanced (sub)Context values (and associated images) |
|---|---|
| sn | create.req,<br>create.isUsed (create, in use),<br>create.suggs (create, suggestions),<br>create.hints (create, enter hints; image unavailable),<br>create.confirm |
| pw | forgot.sent,<br>verify,<br>verify (L0 option),<br>verify.snRecog (verify, L0 recognized),<br>verify.snRecog (verify, L0 recognized, L0 option),<br>verify.afterTimeout (verify, after L2 timeout) |
| mcLogin | confirm |
| sKey | isLocked,<br>change,<br>create (web),<br>create (client),<br>create (homepage),<br>forgot.req,<br>confirm,<br>temp.sent (temp skey sent),<br>verify (client),<br>verify (web),<br>verify.afterTimeout (client) ,<br>verify.afterTimeout (web) (The images for modules verify.afterTimeout (client) and verify.afterTimeout (web) might be deprecated.),<br>temp.verifyCreate (verify temp, create new, client),<br>temp.verifyCreate (verify temp, create new, web) |
| profReg | reg.skeyConf (reg, skey conf.),<br>reg.skeyConf (reg, skey conf, flex reg.),<br>reg.skeyConf (reg, skey conf, internal site),<br>reg.skeyConf (reg, skey conf, internal site, flex reg),<br>reg (reg, ext site),<br>reg (reg, ext site, flex reg),<br>reg (reg, int. site),<br>reg (reg, int site, flex reg),<br>reg.snConf (reg, sn conf., ext site) (image unavailable),<br>reg.snConf (reg, sn conf., int site),<br>reg.snConf (reg, sn conf., ext site, flex reg),<br>reg.snConf (reg, sn conf., int site, flex reg) (image unavailable),<br>cancel.skeyNew (skey still Valid) |
| profSync | sync.opts (diff info, edit),<br>sync (diff info, pick 1),<br>sync (diff info, pick 2) |

## 2.7.4 Module Colors

Once you have created your template, select the modules' font colors and background colors in the Partner Site Configuration Editor. The following fields can be configured:

| | |
|---|---|
| **siteFlexUiModFontColor** | The font color for the module in your customized page |
| **siteFlexUiModBgColor** | The background color for the module in your customized page |
| **siteFlexUiModFontColor** | The module border color in your customized page |
| **siteFlexUiModLegendColor** | The legend color for the module in your customized page |
| **siteFlexUiModHrefColor** | The font color for hypertext links in your customized page |

You can preview the actual login and registration pages as they would be rendered in the user's browser. To do so, enable the "Preview Option" in the siteId configuration editor.

You can also include style sheets in your templates to add special effects to your content. However, SNS defines the styles used by the SNS modules themselves, so SNS may override some of the styles you define. For example, you can configure the SNS module's font color and background color (via the siteId), but you cannot configure the font style or size.

## 2.7.5 Cache Timeouts

To eliminate cases of possible timeouts and to increase performance, SNS caches your template for a preset duration. The customizable timeout value is listed in the Flexible Cobranding Configuration section of the Partner Site Configuration Editor.

With template caching, the maximum timeout is controlled by the partner, but the minimum timeout is controlled by SNS. Specifically:

- SNS presets the minimum cache duration to 5 minutes (as of this release). If you specify a longer timeout value in the siteId, template caching lasts for that amount of time. If you specify a shorter timeout, SNS ignores this value and uses its preset minimum.
- If you don't specify a timeout value in the siteId, then SNS caches the template indefinitely. (In practice, caching will last until the next restart of the SNS server.)
- If SNS determines that the partner's template is too dynamic for caching to be useful (for example, if you send a unique siteState value for each user, thereby creating a non-reusable template variant for every user), SNS will disable caching for that partner's template. Once disabled, SNS will fetch the partner template on every user page request.

As noted previously, you may configure SNS to send certain static (user-context) data with the request for a partner template, thereby allowing the returned template to be customized to that context (for example, Netscape Navigator vs. IE user variant).

1. For a given template URL, SNS will create a separate cache entry for each unique combination of flexible UI user context variable values received by SNS on a page request, with the following exceptions:
    - SNS will ignore and not separately cache unique values for user context variables that the partner has not requested be sent to the URL. For example, if the partner has not configured a template URL to receive User-Agent, MC will not pass User-Agent and therefore will not create separate cache entries for different User-Agent values.
2. Each variant's cache duration will be independent of the other variants' cache durations. For example, an Expires header returned for the IE variant of a template will not effect the cache duration of a cached Navigator variant.

## 2.7.6 Error Handling

When SNS receives an error response from a partner template fetch request, the template URL will be marked as "temporarily unavailable" and the default SNS template will be used instead. In this case, the default SNS template will be cached for the SNS-defined minimum time. After this time elapses, subsequent user requests will trigger SNS to reattempt fetching the partner template.

- The "expired" cached content for that template variant, if it is available, or
- The default SNS template for that SNS page (Login, Create SN, etc.)

## 2.7.7 Tips for Implementing Flex UI

- Place the comment tag "<!--SNSmodule-->" in the template where you want to insert SNS modules.
  **Note**:This comment is case and space sensitive. Be sure to place it just as it appears here.
- Keep in mind that the template will be inserted into an area 345 pixels wide.
- When configuring your siteId, make sure the path names you specify for style sheets and other Flex UI elements are

absolute paths.

- The template you provide must not use frames nor JavaScript, because using them may subject you to browser security problems. Templates with frames will be rejected by the partner site editing tool. If the SNS code verification template finds any JavaScript code in your templates, it will return a security violation error code to the partner login failure URL.
  **Note**: It is always advisable to use tables instead of frames to organize the content of your UI.
- You must provide absolute paths to all links in your global navigation menus, which otherwise may cause inconsistent browser behavior as the templates are rendered in the SNS domain name space, not the partner's domain.
  **Note**: SNS will disregard any document base setting in the your template code as the SNS modules themselves contain some http links.
- You may use any special effect HTML tags to organize your content to match the look and feel of your UI flow.
- While the width of the registration module is static, the length depends on the number of user profile fields your site requests be collected from the user. The page containing the registration module will be scrollable if there are more fields in it than fit on a single screen.
- As the partner's UI template is fetched from the MC server and not from the user's browser (server side fetch), none of the cookies related to their domain will be available to the partners. The partner must use the siteState variable to maintain the user's state or to identify the user session.
- SNS templates, which fetch your cobranding template, perform certain checks to maintain the security of your site, blocking the hacking or modifying of SNS and partner cookies or variables.

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# Chapter 3: Configuring SNS

**Note: Level S authorization is unsupported until Fall 2002. Disregard any documentation references to Level S.**

When you are ready to implement SNS at your site, use the Partner Site Configuration Editor to create and configure your siteId. A siteId defines information about your site's configuration, along with the return handlers and cobranding information. The siteId is stored on SNS servers and is passed as a query string parameter to the SNS URLs.

This chapter contains the following sections:



Refer to the SNS Milestones in Appendix B so that you understand the complete implementation process. Also review the UI Style Guide to learn more about customizing cobrand templates.

## 3.1 Signing in to the Configuration Editor

To sign in to the Partner Site Configuration Editor:

1. Point your browser to the sign-in URL:
   http://sns-siteIddev.web.aol.com/_cqr/siteEditTool/logIn_siteEditor.tmpl
2. Sign in:
   a. If you have a screen name, enter your screen name and password, then click "Sign In".
   b. If you don't have a screen name, click "Get one FREE!" to create a screen name.

## 3.2 Creating or Editing Your siteId

After you sign in, the Partner Site Configuration Editor displays the Welcome page, shown below:


On the Welcome page, you can take one of four actions:

- Edit an existing site.
- Create a new site from scratch.
- Create a new site based on an existing site.
- View (read-only) an existing site.

## 3.2.1 To edit an existing site:

1. Type an existing siteId.
   **Note:** To modify a siteId, your screen name must be in the access list for that site.
2. Click "Edit Site."

   The Site Configuration page appears. The top portion displays the time of last modification, as shown here:


## 3.2.2 To create a new site from scratch:

1. Type a new siteID.
   Consider using the naming convention *partner*Dev, such as AOLDev1 or AOLDevjeff8080.
2. Choose a lang-locale for your site.
   See Table A.3 in Appendix A for more information about supported languages.

3. Click "New Site."

   The Site Configuration page appears. The top portion looks like this:


### 3.2.3 To create a new site based on an existing site:

Type an existing siteId and click "Copy Site." The Site Configuration page appears, and it looks the same as when you are editing an existing site.

### 3.2.4 To view (read-only) an existing site:

Type an existing siteId and click "View Site." The Site Configuration page appears. Here's an example of how the top portion might appear:


**Configuration Settings for site: bugsBunnyDev**

## 3.3 Configuring Your SiteId

After you enter a siteId on the Welcome page and click the associated button, the Site Configuration page appears. On this page, you specify settings that allow your site to interact with SNS. For example, you'll define the URLs of your site's handlers, your domain, your service preferences and co-brand settings, and other information.

When you are creating or editing a siteId, note the following:

- To obtain help, you can click the link labeled "Help On Site Configuration Fields."
- You can jump directly to specific sections of the Site Configuration page by clicking links in the "Go To" navigation bar.
- Certain settings, shown in *red italics*, are for internal partners only.
- If you resize your browser window or click the Back button, any changes you've made to the form will be lost.

### 3.3.1 Saving or Abandoning Your Changes

The Site Configuration page is not designed to be completed all at once. You can fill in a few fields, save those changes, and return later to edit your configuration.

When you're ready to save your edits, click the Save button. To abandon your changes without saving them, click "Edit Another Site." These features are located both at the top and bottom of the form. They look like this:


When you click "Save," a preview page appears. It begins as follows:

Dear *ScreenName*,

The following changes have been done to your Site Configuration:

On the preview page:

1. Review the changes, which are marked in red.
2. Scroll to the bottom of the page.
3. If you're satisfied with the changes, click "Submit Changes."
   A confirmation page will appear, and you'll have the option of sending email to mc-siteconfig@netscape.com.
4. To abandon the changes, click "Undo Changes."
   You'll return to the Site Configuration page.

### 3.3.2 Configuring Server Information

In the first part of the configuration form, you define the access characteristics of your servers: the domain name, the IP addresses, and (if desired) additional screen names that can modify your configuration.

For information about configuring this section, see the online help.

In addition, there are several Miscellaneous Options you can configure.

### 3.3.3 Configuring URLs for Sites Using Levels 0, 1, or 2

In this section of the Site Configuration Page, you configure URLs for authentication and registration. The URLs must be fully-qualified in URI format. For example, use something like **http://server.xyz.com/login.html**, rather than **login.html**. The URLs in this section are for Level 0, 1, or 2 sites only. URLs must use ASCII characters and cannot exceed 255 characters.

For information about configuring this section, see the online help.

### 3.3.4 Configuring Flexible Cobranding

The next section of the Site Configuration page is where you define your flexible cobranding.

For information about configuring this section, see the online help.

### 3.3.5 Configuring Default Cobranding

**You must supply cobranding information, even if your site uses the FlexUI template.** If SNS encounters an error when fetching your FlexUI template URL, SNS reverts to the default template. The default template will include the cobranding configuration you specify in this section.

For information about configuring this section, see the online help.

### 3.3.6 Configuring Shared Profile Data

Below the default cobranding section is the section for shared profile configuration. Use the profile configuration to define:

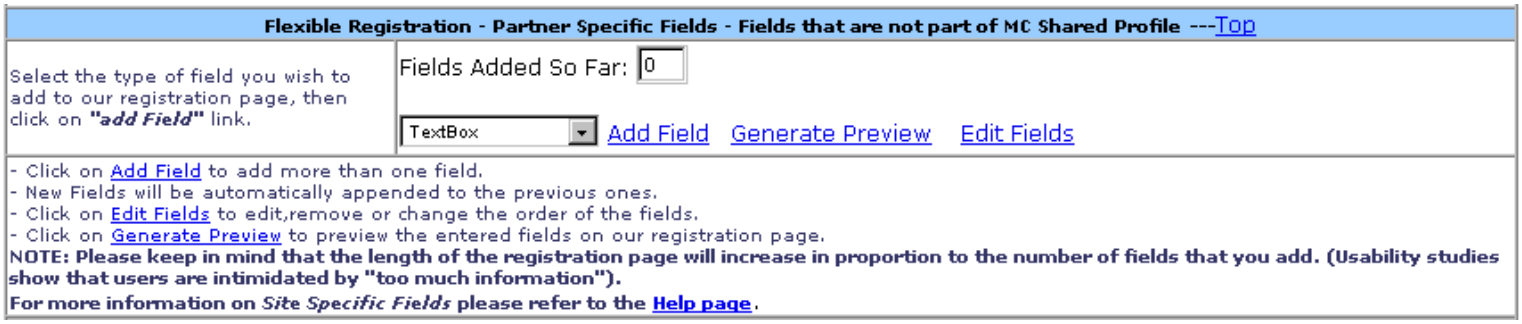
- Which fields a user sees during registration.
- Whether the user is required to fill in the field, or whether it's optional.

SNS requires users to supply their user name, email address, and gender at registration time. Configure the remaining fields as either "Required" or "Optional." If a field does not apply to your site, leave the check boxes blank for that field.

For descriptions of the available profile fields, see Table A.1 in this guide.

### 3.3.7 Configuring Flexible Registration

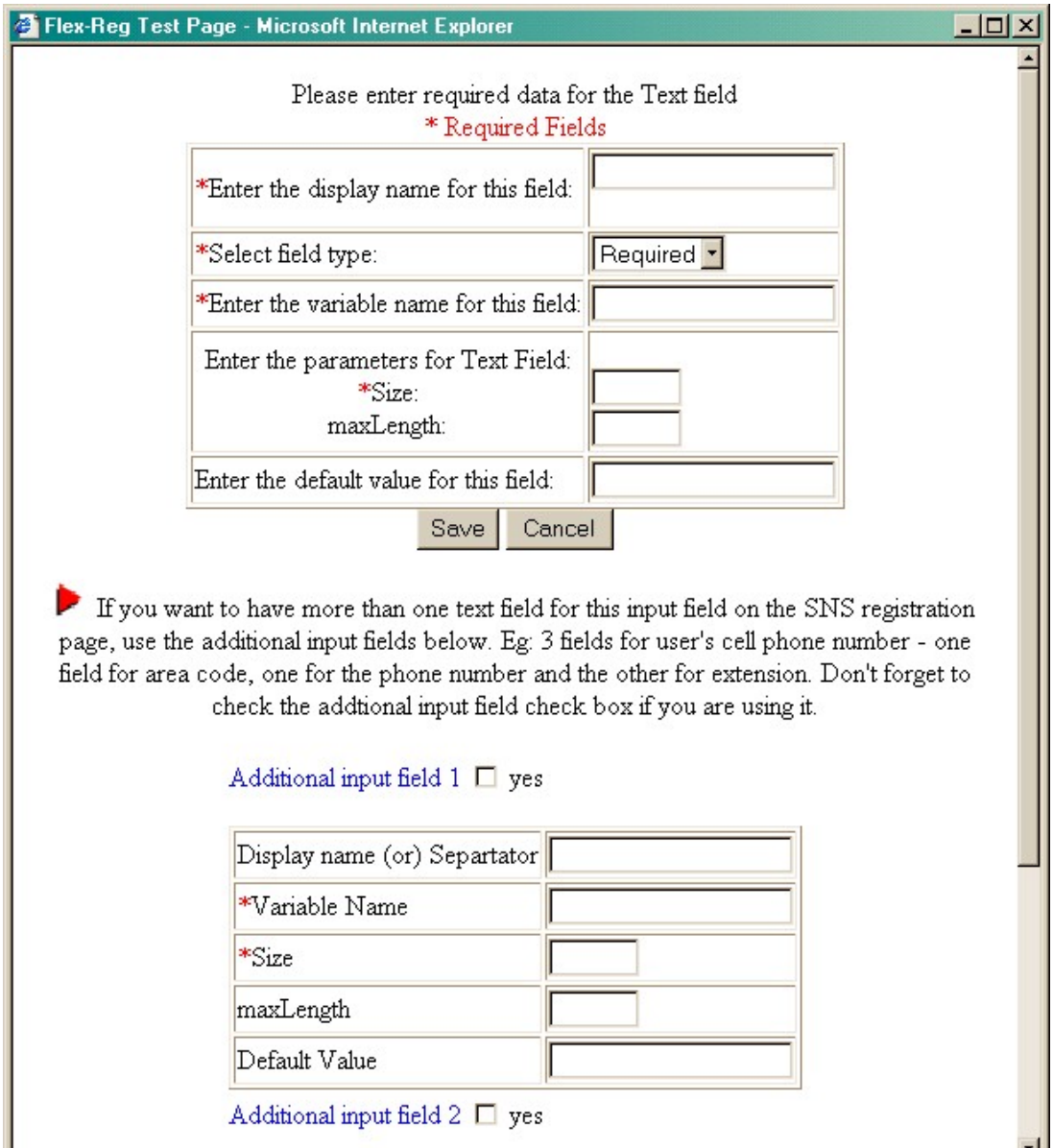
If your site requires user registration information in addition to those fields supplied by SNS, you can specify those fields (such as favorite food or favorite sport) in the "Flexible Registration" section of the Site Configuration page. This section is shown below:

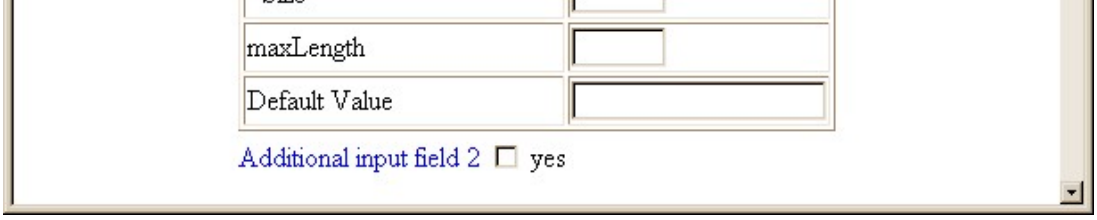



To specify additional fields:

1. Select the type of field you wish to add, then click "Add Field." The list of fields you can select from is:

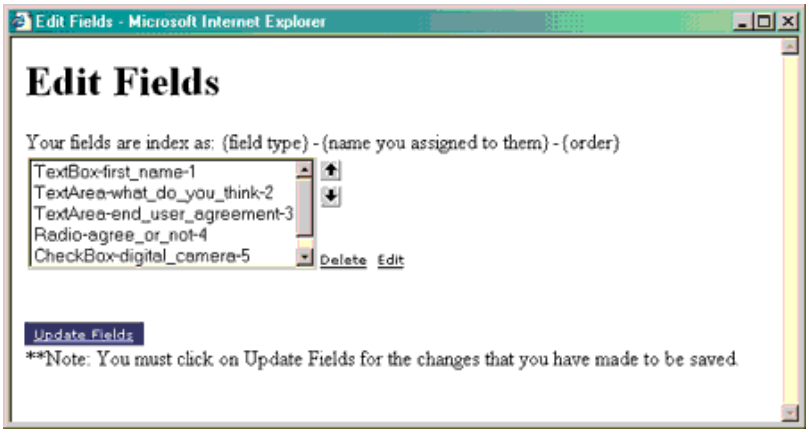

2. Define the input field you are adding. You can also add text fields to an input field by using the additional input fields. For example, if you are collecting user cell phone numbers, you may want separate fields each for the area code, the prefix, and the 4-digit phone number.






3. Click "Save".

4. You can edit, remove, or change the order of fields you have already defined by clicking on "Edit Fields".




5. Generate a preview of your Sign-In page by clicking "Generate Preview."

### 3.3.8 Configuring Secure HTTP Sessions

The last section of the Site Configuration page is where you specify URLs for Level S authentication. (Level S authentication will not be supported until the year 2002.) The URLs in this section correspond to those described earlier in this guide, in Configuring URLs for Sites Using Levels 0, 1, or 2.

## 3.4 Testing Your Implementation

SNS provides a testing environment which lets you step through the actions of your handlers and debug any problems. From a technical perspective, the testing environment is identical to the production version of SNS, except that it provides you with additional feedback information about the interaction of the site with your handlers.

When you are ready to begin testing, set your handlers to interact with the SNS Configuration values given in Table 3.1. Then create test Screen Names and use the service to sign-in to your site.

If your site requires secure authentication (Level S), you must test your implementation on a secure server (https). The field names for secure URLs are noted below by adding the ending [_S] to the name of the regular handler. The protocol for the associated test environment URL is https. If your application uses level 0, 1, or 2 authentication, use the Field Name that ends in "Url" and regular http. If your application uses level S authentication, use the Field Name that ends in "Url_S" and secure https.

**Table 3.1 SNS Test URLs for Implementation Test Environment**

| Field Name | Description and URL (for test environment only) |
|---|---|
| mcLoginImgUrl | Fully-qualified URL of the SNS sign-in image (hosted from the SNS site).<br><br>http://sns-certify.web.aol.com/images/login.gif |
| mcLoginUrl | Fully-qualified URL of the SNS site's sign-in handler.<br><br>http://sns-certify.web.aol.com/_cqr/login/login.psp |
| mcLoginTokValUrl | Fully-qualified URL of the SNS site's token-validation handler for the sign-in sequence.<br><br>http://sns-certify.web.aol.com/_cqr/mcLoginTokVal.tmpl |

| | |
|---|---|
| mcLogoutImgUrl | Fully-qualified URL of the SNS sign-out image (hosted from the SNS site).<br><br>http://sns-certify.web.aol.com/images/logout.gif |
| mcLogoutUrl | Fully-qualified URL of the SNS site's sign-out handler.<br><br>http://sns-certify.web.aol.com/_cqr/logout/mcLogout.tmpl |
| mcLogoutSuccImgUrl | Fully-qualified URL of the sign-out success image (hosted from the SNS site).<br><br>http://sns-certify.web.aol.com/images/logged_out.gif |
| mcLogoutFailImgUrl | Fully-qualified URL of the sign-out fail image (hosted from the SNS site).<br><br>http://sns-certify.web.aol.com/images/logout_fail.gif |
| mcProfSyncUrl | Fully-qualified URL of the SNS site's profile-synchronization handler.<br><br>http://sns-certify.web.aol.com/_cqr/sync/start.tmpl |
| mcProfTokValUrl | Fully-qualified URL of the SNS site's token-validation handler for the profile-synchronization sequence.<br><br>http://sns-certify.web.aol.com/_cqr/mcProfTokVal.tmpl |
| mcProfLastModUrl | SNS profile-last-modified timestamp fetch URL.<br><br>http://sns-certify.web.aol.com/_cqr/lastMod/mcProfLastMod.tmpl |

## 3.5 Activating Your Site

Once you are satisfied that your handlers are interacting with the SNS site properly, including error conditions, notify your account manager and your Integration Engineer by email (sns-support@netscape.com) to request a walkthrough. This mandatory walkthrough ensures that your site's implementation functions correctly and displays the appropriate UI. After the walkthrough, your Integration Engineer will provide instructions on setting up a production siteId and the list of SNS production URLs.

Be sure that you have provided all of the cobranding information required for siteId configuration as specified in the style guide.

After switching to the production SNS Configuration, you may want to retest your implementation.

When you are ready to activate your SNS implementation, send an email message to your Integration Engineer (sns-support@netscape.com) with the subject "Production siteId Configuration." Inform your Integration Engineer that your implementation is tested and ready to be activated.

## 3.6 Site Configuration Reference

This section describes the fields to be defined when you use the Partner Site Configuration Editor. The fields are grouped into the following categories:



**Table 3.2 Server Access**

| Field | Description |
|---|---|
| **Screen Names Allowed to Access/Modify siteId** | A colon-separated list of screen names that have permission to edit the configuration. The creator of the siteId is automatically added to this list. |

| | |
|---|---|
| **Save Button** | Click Save to launch a preview page. At the bottom of the preview page, you either submit or undo the changes. |
| **Don't Save / Edit Another Site Link** | Click this button to abandon changes and return to the Start page of the Configuration Editor. |
| **siteId** | An ASCII string that uniquely identifies your site. Alphanumeric characters only. This parameter is passed as a query string for requests to SNS. We recommend putting your organization in the siteId, and including "Dev" in the name if you are in the development stage.<br>Examples: cnnDev1, aolDevAdmin80 |
| **siteDomain** | Domain where your development or production servers will reside. All configuration URLs must include this domain name. Any server-to-server requests to SNS must come from a server on this domain.<br>Example: netscape.com |
| **serverIps** | Range of IP addresses in your domain for which SNS will allow server-to-server communication. If only one IP address, specify it as both the minimum and maximum. Use a semicolon to separate each range.<br>Example, single server: 11.11.11.00 - 11.11.11.00<br>Example, continuous range: 11.11.11.25 - 11.11.11.33<br>Example, multiple ranges: 11.11.11.25 - 11.11.11.33; 11.11.11.76 - 11.11.11.87 |

**Table 3.3 Miscellaneous Options**

| Field | Description |
|---|---|
| **Profile Push Enabled** | When set to y, profile synchronization occurs automatically, whenever it's needed. |
| **siteState Extra Encoding** | When set to y, siteState data is returned on the query string. |
| **Site Auth Levels** | A colon-separated list of authorization levels. If nothing is specified, the default level is 1. |
| **Is Netscape Network Site?** | If this siteID is for a Netscape Network participant site, then set this field to y. |
| **Lang,Locale** | The language and locale for the SNS pages. This is useful only for sites that need to support international or localized pages. You must create a separate siteId for each lang-locale you need. |
| **Date Format** | The format for the date that users will see on your Registration page and Edit Profile page. Possible formats are MM/DD/YY, DD/MM/YY, or YY/MM/DD (where MM, DD, and YY indicate a 2-digit month, day, and year). |
| **Use MC Privacy Policy** | When you set this field to y (yes), the Privacy Policy link will point to the SNS privacy policy instead of pointing to your site's privacy policy URL. Enabling this field is useful if, for example, your site performs no registration and therefore needs no privacy policy. |
| **Is 'Nice' Site?** | In most cases, leave this set to the default, n (No).<br><br>Relevant only when the 'Is Netscape Network Site' field is set to y. A Nice Site is a Netscape Network participant that lets users access its site, even if these users are non-members. Applications like WebMail and Calendar, which don't contain member-exclusive content, are good candidates for behaving as a Nice Site. A Nice Site will prompt non-member users to register with Netscape Network. If the user refuses, a Nice Site will nonetheless allow the user to pass through. On a subsequent user session, the Nice Site will again prompt a non-member to register. The user will be prompted up to five times (five separate browser sessions). If, after five prompts, the user does not register with Netscape Network, the Nice Site will stop prompting the user. Thereafter, the user will always pass through to the site and will no longer be asked to register.<br><br>By contrast, the default setting (n) means this siteID is a 'Tough Site.' A Tough Site *always* prompts non-members to join Netscape Network. If they refuse to register, then they are denied access to the requested link. The default setting ensures that access to member-exclusive content is restricted to registered members only. Most AOLTW brands will want to leave this setting as 'No'. |
| **Login Auto Init** | When set to y, your site will be enabled for auto-initiated sign-in. Your users will be directed to your site's "confirm sign-in" page. |
| **Suppress Privacy Policy** | For internal use only. Special case for AOL.com. |
| **Site Brand Name** | Select the brand associated with this siteId. |

**Table 3.4 Site Configuration Urls**

| Field | Description |
|---|---|

| | |
|---|---|
| **siteLoginUrl** | URL to which the SNS site should redirect users, if sign-in succeeds. |
| **Max. Time Out** | Time, in seconds, after which a request is halted and marked as failed if not received by SNS. Applies to Level 2 sites only. |
| **siteLoginFailUrl** | URL to which SNS site should redirect users, if sign-in fails. |
| **siteLoginCancelUrl** | URL to which SNS site should redirect users, if users cancel sign-in sequence. |
| **siteLogoutUrl** | URL to which SNS site should redirect users, if sign-out succeeds. SNS fetches this URL when users click the sign-out button. It's recommended that you define this URL handler to delete application-specific cookies and to direct users back to the mcLogoutSuccImgUrl. |
| **siteLogoutFailUrl** | URL to which SNS site should redirect users, if sign-out fails. |
| **siteLogoutCancelUrl** | URL to which SNS site should redirect users, if users cancel sign-out sequence. |
| **siteProfSyncUrl** | URL of your site's profile-synchronization handler. This is the site where the user's data (name, email, etc.) will be posted. |
| **siteProfSyncFailUrl** | URL to which the SNS site should redirect users, if profile synchronization fails. |
| **siteProfSyncCancelUrl** | URL to which the SNS site should redirect users if users cancel profile-synchronization sequence. |
| **siteProfLastModUrl** | URL used to obtain the user's last-modified time stamp. The time stamp verifies whether the user data is stale or current. |
| **siteProfLastModFailUrl** | URL to which the SNS site should redirect users, if verification of the time stamp fails. |
| **siteProfLastModCancelUrl** | URL to which the SNS site should redirect users, if users cancel the verification of their last-modified timestamp. |
| **siteProfDirReadUrl** | Not needed by external partners. Optional for internal partners. |
| **siteProfDirReadFailUrl** | Not needed by external partners. Optional for internal partners. |
| **siteProfDirWriteUrl** | Not needed by external partners. Optional for internal partners. |
| **siteProfDirWriteFailUrl** | Not needed by external partners. Optional for internal partners. |
| **sitePrivacyUrl** | URL of your site's privacy policy statement. |
| **siteReturnUrl** | URL on the logout page to which you will return users (for example, back to a home page). |
| **Public Key** | For internal use only. Specifies the public key for sites that use the VL5 plug-in. Use the value that is listed in your server's wskey.txt file. |

**Table 3.5 Site Flexible Cobranding Configuration**

| Field | Description |
|---|---|
| **FlexUi Tmpl Url** | URL of the template for your customized pages. SNS fetches this template in real time. |
| **MC Context (McCtx)** | If set to yes, SNS sends this value to your flexible UI template. MC Context consists of up to 6 values: sn, pw, mcLogin, sKey, profReg, and profSync. For details, refer to the "Main Context" section in the Implementation Guide. |
| **Sub-MC Context (McCtx2)** | If set to yes, SNS sends this value to your flexible UI template. The Sub-MC Context consists of up to 6 values: sn, pw, mcLogin, sKey, profReg, and profSync. For details, refer to the "Advanced (sub)Context (Optional)" section in the Implementation Guide. |
| **Lang Locale (LangLoc)** | If set to yes, SNS sends this value to your flexible UI template. |
| **SiteId** | If set to yes, SNS sends this value to your flexible UI template. |
| **SiteState** | If set to yes, SNS sends this value to your flexible UI template.<br><br>SiteState is an optional field containing arbitrary site or session data. This data is carried on each page the user visits during an SNS-enabled session. For example, SiteState could contain the URL of the page from which the user clicked the SNS sign-in image. |
| **User-Agent** | If set to yes, SNS sends this value to your flexible UI template. User Agent is the "user agent" HTTP header associated with the web browser. |
| **FlexUi Tmpl Cache TimeOut** | Cache timeout in seconds for your FlexUi Template Url. |
| **MC Module Font Color** | Font color for the module on your customized page. Example: FFFFFF for white or 000000 for black. |
| **MC Module Bg Color** | Background color for the module on your customized page. Example: FFFFFF for white or 000000 for black. |
| **MC Module Chrome Color** | Border color for the module on your customized page. Example: FFFFFF for white or 000000 for black. |
| **MC Module Legend Color** | Legend color for the module on your customized page. Example: FFFFFF for white or 000000 for black. |

| | |
|---|---|
| **MC Module Href Color** | Color of hypertext links for the module on your customized page. Example: FFFFFF for white or 000000 for black. |

**Table 3.6 Site Default Cobranding Configuration**

| Field | Description |
|---|---|
| **siteCobrandImgUrl** | Fully-qualified URL of the image for your logo (cobrand image). This logo will appear on SNS screens and must be 345 pixels wide by 45 pixels high. The URL is ASCII format, not to exceed 255 characters. |
| **siteCobrandBenefitStmt** | Text string that summarizes the benefits of registering at your site, such as the content or services you provide to registered users that are not available to unregistered users. Users can view this statement by clicking a link in the SNS screens. This string is UTF-8 format. It can include HTML tags but must not exceed 255 characters. |
| **siteCobrandDataUsageStmt** | Text string that summarizes how your site will use the Screen Name and profile data obtained from the user. The user can view this statement by clicking a link in the SNS screens (for example, on a registration page). This string is UTF-8 format. It can include HTML tags but must not exceed 255 characters. |
| **siteCobrandDisplayName** | Text string that appears on SNS screens to display your product name or company name, such as PetPlace, Bigstep, or Nextdoor. This string is UTF-8 format. Maximum length is 50 characters. HTML tags are **not permitted**. |

**Table 3.7 Shared Profile Configuration**

| Field | Description |
|---|---|
| **Profile Field** | P3P indentifier representing user's profile data. For details on the dozens of profile fields that you can configure, refer to Appendix A, "SNS User Profile". |
| **Required?** | If checked, SNS performs input validation on the supplied value. |
| **Optional?** | If checked, SNS does not perform input validation on the supplied value. |
| **Direct Read?** | For internal use only. |
| **Direct Write?** | For internal use only. |

**Table 3.8 Flexible Registration - Partner Specific Fields**

| Field | Description |
|---|---|
| **Site Specific Fields** | Screen Name Service now supports a flexible registration page which will allows you to pass any data fields that you may need as part of the registration requirements for the users. The new version of the SNS registration page will show all SNS specific and site specific fields together in a single page without any need for you to show your site specific fields on a different page. Once the user enters the required information in your fields, SNS sends the data to your site without storing it in SNS. For more information refer to the help page on Site Specific Fields. |

# Chapter 4: Authentication Levels

**Note: Level S authorization is unsupported until Fall 2002. Disregard any documentation references to Level S.**

Screen Name Service offers the following levels of authentication:

- L0, Permanent Authentication
- L1, Session Authentication
- L2, Timed Session Authentication

This chapter presents sample flows of each authentication level. All user authentication tasks occur within the Screen Name Service flow.

You can choose the authentication level that meets your site's requirements. If you like, you can also offer permanent authentication for an LS site. In this case, the Screen Name and Password are remembered if the user makes that choice, but the user is challenged every time for the Security Key. Authentication ends when a user clicks the signout button. At this point, a pop-up window appears. This window is not part of the Screen Name Service flow. Rather, the window is there to facilitate the sign-out process. Users can also end authentication by closing the browser or by disconnecting from the

Internet.

# 4.1 L0: Permanent Authentication

When users are prompted to sign in, SNS provides an option that lets them remain signed in with their screen name and password "permanently" — that is, until they click the sign out button at the site. By choosing this option, users are not required to authenticate at the site on their next visit.

## 4.1.1 Authentication for a Non-Remembered User

Figure 4.1 shows a typical navigation flow if the user is not authenticated. In summary, the user will:

1. Click the Sign-in button.
2. See your site's sign-in page (which contains the embedded SNS sign-in module).
3. Enter the screen name and password.
4. Enable the "Remember Me" checkbox (if not already enabled by default).
5. Click the Sign In button and be authenticated.
6. End the session without clicking Sign Out (for example, by closing the window).

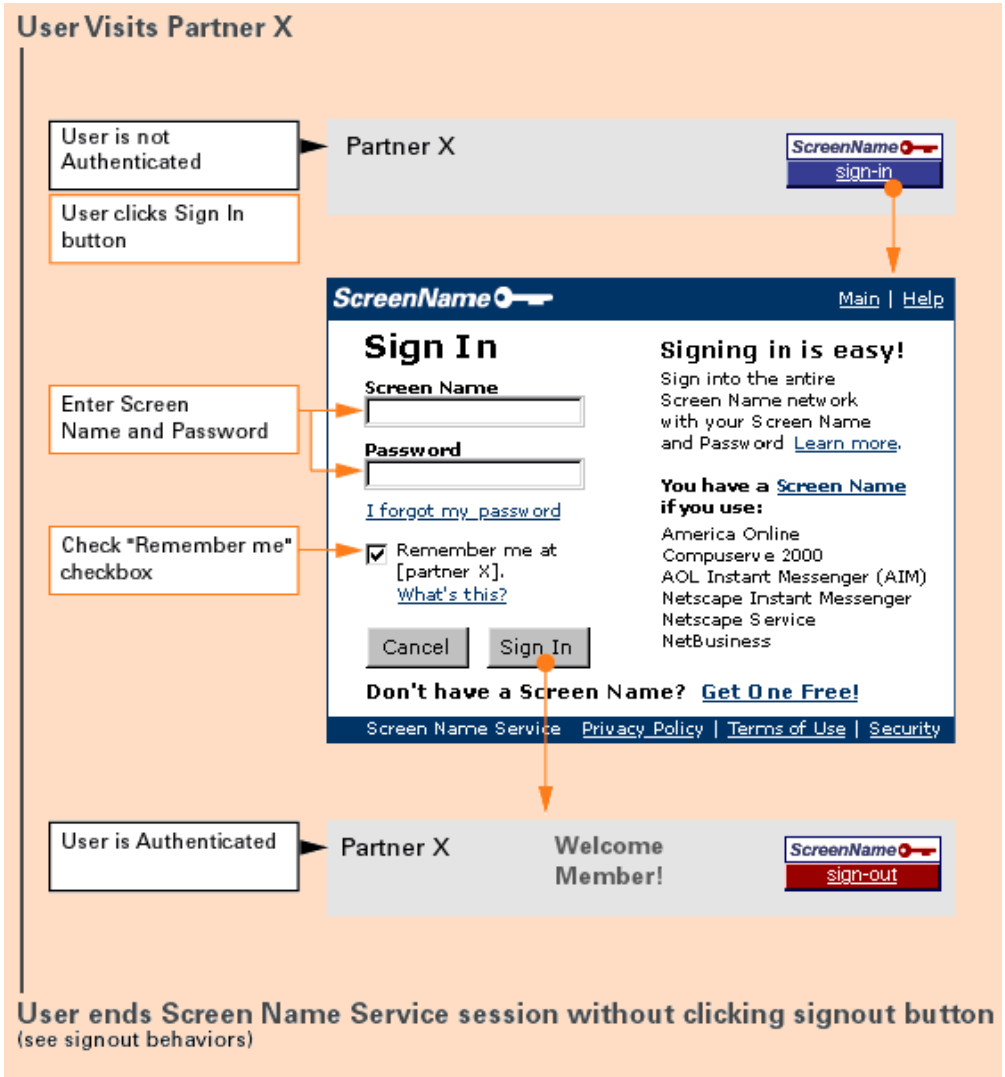



**Figure 4.1 A first-time visitor can enable L0 authentication as shown in the above diagram.**

Note that by default, the sign-in page will appear with the "Remember Me" checkbox enabled. If you want your users to explicitly enable permanent authentication, you can change the sign-in behavior so that "Remember Me" is not pre-selected by default. To make this change, send a request to sns-support@netscape.com.

### 4.1.2 Authentication for a Remembered User

Figure 4.2 shows that a remembered user is automatically authenticated on the next visit. Authentication persists until the user clicks the sign-out button.


**Figure 4.2 Return visitors can sign in immediately if your site remembers them.**

## 4.2 L1: Session Authentication

With L1 authentication, users who sign in through SNS will remain authenticated for the duration of their session. Figure 4.3 shows the flow for the first-time sign in, and Figure 4.4 shows the flow for the return sign in.

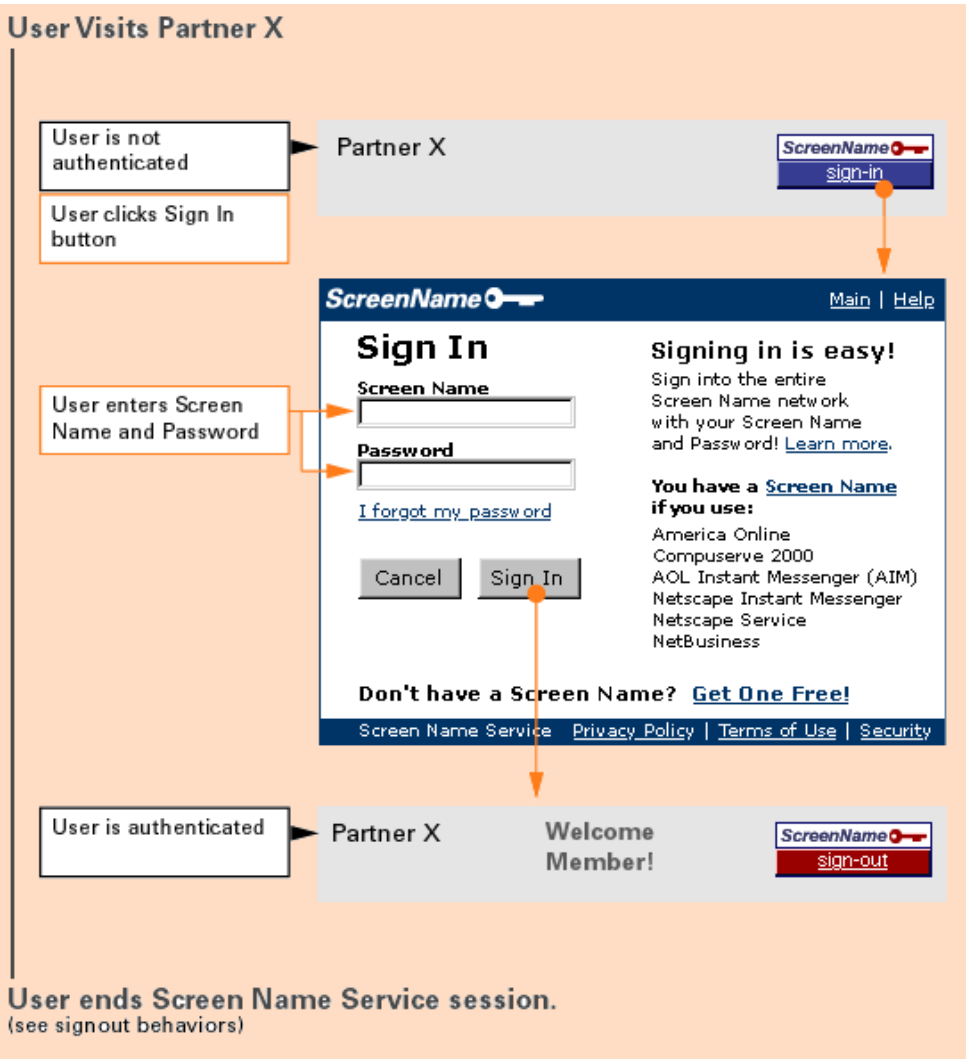



**Figure 4.3 Visitors remain authenticated throughout their session.**

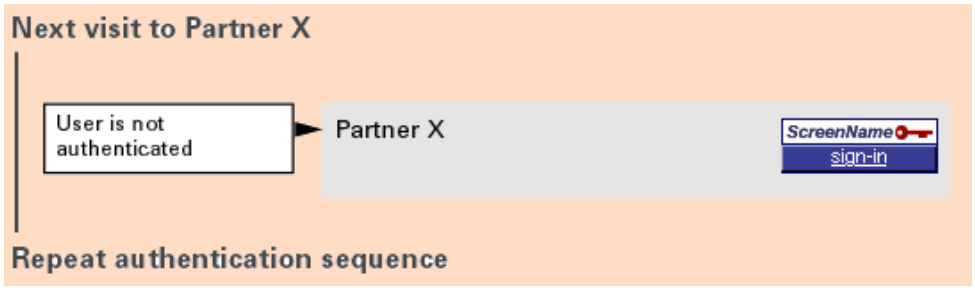



**Figure 4.4 Repeat visitors must sign in again.**

## 4.3 L2: Timed Session Authentication

With L2 authentication, you can configure your site to end authentication after a certain length of user inactivity. If users revisit your site after the time has expired, they must verify their password to continue.

Figure 4.5 shows a typical navigation flow for the first visit:

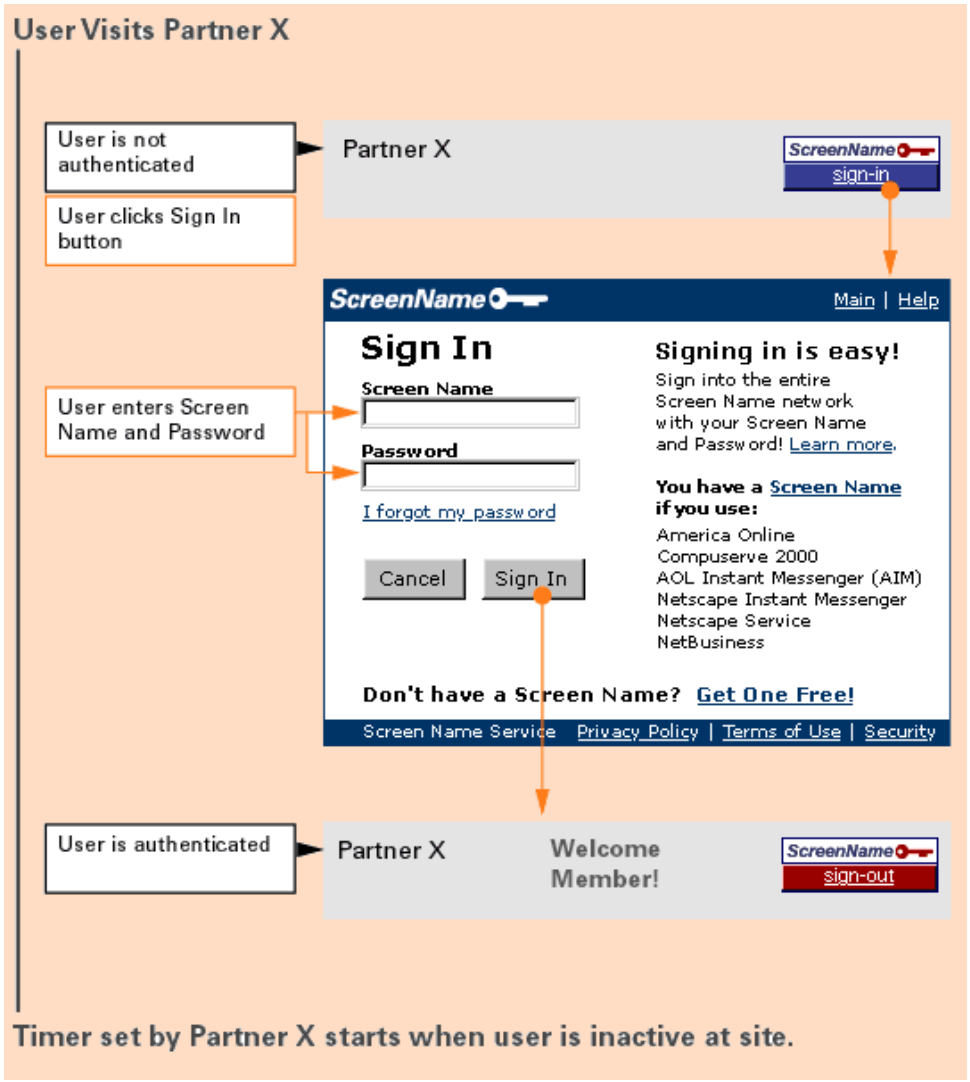



**Figure 4.5 L2 authentication involves a partner-configured timeout.**

Figure 4.6 shows the effect of L2 authentication on a repeat visit:

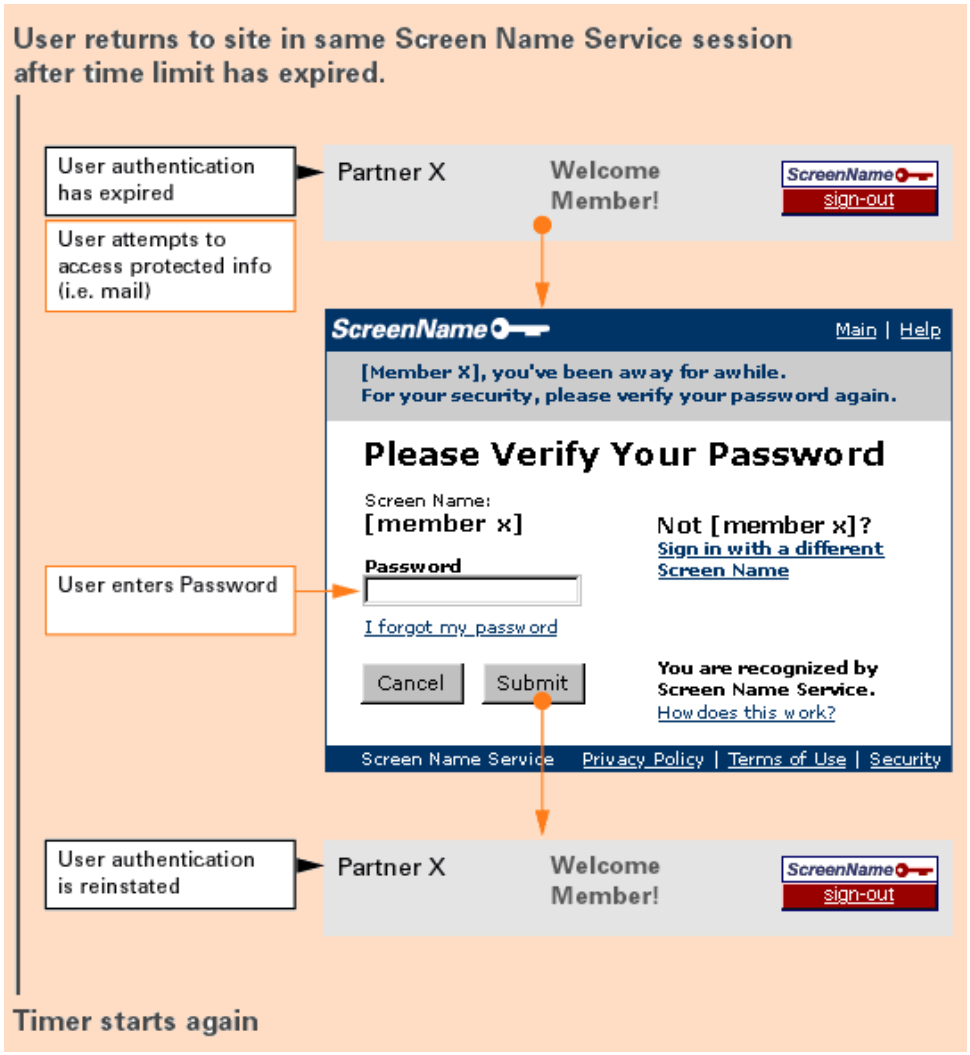



**Figure 4.6 Return visitors must re-authenticate if they exceed the timeout value.**

---

# Appendix A: SNS User Profile

SNS stores a central set of profile data for users. Users can transfer this profile data to partner sites when registering at those sites.

- Table A.1 lists the fields that are defined for an SNS user profile.
- Table A.2 lists the possible values for the user_timezone field in the SNS profile schema.
- Table A.3 lists the possible values for the user_lang_preferred field in the SNS profile schema.

## A.1 SNS User Profile Fields

Table A.1 describes the profile fields supported by the SNS profile, along with possible values. The table also specifies each field's format and maximum length.

Most of the SNS profile field names and types conform to the Platform for Privacy Preferences (P3P) Base Data Schema. Fields that are extensions to the P3P schema are marked with an asterisk (*). For more information about the P3P Base Data Schema, refer to: http://www.w3.org/TR/P3P.

**Table A.1 Fields in the SNS User Profile**

| Field Name | Format | Max. Length |
|---|---|---|
| user_name_first<br>First name (given name) | UTF-8 | 30 |
| user_name_last<br>Last name (surname) | UTF-8 | 30 |
| user_name_middle<br>Middle initial | UTF-8 | 30 |
| user_home_online_email<br>Email address | ASCII | 255 |
| user_gender<br>Gender. Possible value:<br>M = Male<br>F = Female<br>-1 = Rather not say | ASCII | 2 |
| user_home_postal_street_line1<br>Street address, line 1 | UTF-8 | 30 |
| user_home_postal_street_line2<br>Street address, line 2 | UTF-8 | 30 |
| user_home_postal_street_line3<br>Street address, line 3 | UTF-8 | 30 |
| user_home_postal_city<br>Residence city | UTF-8 | 30 |
| user_home_postal_stateprov<br>Residence state or province code. Possible value:<br>• An official USPS abbreviation.<br>• An official Canadian Postal abbreviation.<br>• -1 = non-U.S./Canada.<br>Note: Many web sites list the postal abbreviations. For example, see: http://www.10mb.com/postal_abbreviations.htm. | ASCII | 2 |
| user_home_postal_postalcode<br>Residence zip/postal code | UTF-8 | 14 |
| user_home_postal_countrycode<br>Residence country code. Possible value:<br>one of the 2-letter ISO 3166 country codes listed in:<br>http://www.din.de/gremien/nas/nabd/iso3166ma/codlstp1/en_listp1.html | ASCII | 2 |
| user_timezone*<br>Residence timezone. Possible value:<br>one of the timezones listed in Table A.2. | ASCII | 25 |
| user_bdate_ymd_year<br>Year of birth. | ASCII | 4 |
| user_bdate_ymd_month<br>Month of birth. | ASCII | 2 |
| user_bdate_ymd_day<br>Day (of month) of birth. | ASCII | 2 |
| user_lang_preferred*<br>Preferred language. Possible value:<br>one of the language codes listed in Table A.3. | ASCII | 2 |
| user_marital_status*<br>Marital status. Possible value:<br>0 = Single<br>1 = Married<br>2 = Separated<br>3 = Divorced<br>4 = Widowed<br>-1 = Rather not say | ASCII | 2 |

| | | |
|---|---|---|
| user_education_level*<br>The user's education level. Possible value:<br>1 = Junior High School Student<br>2 = High School Student<br>3 = High School Graduate<br>4 = Some College<br>5 = College Graduate<br>6 = Some Graduate School<br>7 = Masters Degree<br>8 = Doctorate Degree<br>0 = Other<br>-1 = Rather not say | ASCII | 2 |
| user_income_level*<br>Annual income level, in U.S. dollars. Possible value:<br>0 = Less than $15,000<br>15 = $15,000 to $29,999<br>30 = $30,000 to $49,999<br>50 = $50,000 to $74,999<br>75 = $75,000 to $99,999<br>100 = $100,000 to $124,999<br>125 = More than $125,000<br>-1 = Rather not say | ASCII | 3 |
| user_occupation*<br>The user's occupation. Possible value:<br>1 = Executive/Managerial<br>2 = Professional (doctor/lawyer)<br>3 = Academic/Educator<br>4 = Computer/Technology/Engineering<br>5 = Other Technology/Engineering<br>6 = Service/Customer Support<br>7 = Clerical/Administrative<br>8 = Sales/Marketing<br>9 = Tradesman/Craftsman<br>10 = Junior High School Student<br>11 = High School Student<br>12 = College or Graduate Student<br>13 = Homemaker<br>14 = Self Employment/Own Business<br>15 = Unemployed/Looking for Job<br>16 = Retired<br>0 = Other<br>-1 = Rather not say | ASCII | 2 |
| user_industry*<br>Industry. Possible value:<br>1 = Accounting/Finance<br>2 = Computer Related (IS, MIS, DP, Internet)<br>3 = Computer Related (Hardware)<br>4 = Computer Related (Software Development)<br>5 = Consulting, Education/Training<br>6 = Engineering<br>7 = Government/Military<br>8 = Legal Services<br>9 = Manufacturing/Production/Operations<br>10 = Medical Services<br>11 = Research & Development<br>12 = Sales/Marketing<br>0 = Other<br>-1 = Rather not say | ASCII | 2 |
| user_home_telecom_phone_intcode<br>Home telephone number, international (country) code, as specified in Country Code column of:<br>http://www.att.com/traveler/tools/codes.html | ASCII | 4 |
| user_home_telecom_phone_loccode<br>Home telephone number, local area/city code, as specified in City Code column of:<br>http://www.att.com/traveler/tools/codes.html | ASCII | 4 |

| | | |
|---|---|---|
| user_home_telecom_phone_number<br>Home telephone number, base. | ASCII | 10 |
| user_business_telecom_phone_intcode<br>Business telephone number, international (country) code, as specified in Country Code column of: http://www.att.com/traveler/tools/codes.html | ASCII | 4 |
| user_business_telecom_phone_loccode<br>Business telephone number, local area/city code, as specified in City Code column of: http://www.att.com/traveler/tools/codes.html | ASCII | 4 |
| user_business_telecom_phone_number<br>Business telephone number, base. | ASCII | 10 |
| user_business_telecom_phone_ext<br>Business telephone number, extension. | ASCII | 10 |

# A.2 Values for user_timezone Field

Table A.2 lists the possible values for the user_timezone field in the SNS profile schema. The values are a subset of those that appear in the database used by Java, several Unix implementations, and elsewhere. For more information about the database, refer to http://www.twinsun.com/tz/tz-link.htm.

**Table A.2 Possible Values for user_timezone in the SNS Profile Schema**

| Value | Description |
|---|---|
| America/New_York | U.S./Canada Eastern |
| America/Chicago | U.S./Canada Central |
| America/Denver | U.S./Canada Mountain |
| America/Los_Angeles | U.S./Canada Pacific |
| America/Anchorage | U.S. Alaska |
| America/Phoenix | U.S. Arizona |
| Pacific/Honolulu | U.S. Hawaii |
| America/Indianapolis | U.S. Indiana East |
| UTC | UTC +00:00 Universal Coordinated Time (Reykjavik) |
| Europe/London | UTC +00:00 Western Europe (London) |
| Africa/Brazzaville | UTC +01:00 Central Africa (Brazzaville) |
| Europe/Paris | UTC +01:00 Central Europe (Paris) |
| Africa/Johannesburg | UTC +02:00 Eastern Africa (Johannesburg) |
| Europe/Athens | UTC +02:00 Eastern Europe (Athens) |
| Asia/Riyadh | UTC +03:00 Eastern Africa, Western Asia (Riyadh) |
| Europe/Moscow | UTC +03:00 Russian Federation - Two (Moscow) |
| Asia/Dubai | UTC +04:00 Oman, U.A.E. (Dubai) |
| Europe/Samara | UTC +04:00 Russian Federation - Three (Samara) |
| Asia/Karachi | UTC +05:00 Western Asia, Pakistan (Karachi) |
| Asia/Yekaterinburg | UTC +05:00 Russian Federation - Four (Yekaterinburg) |
| Asia/Calcutta | UTC +05:30 India (Calcutta) |
| Asia/Katmandu | UTC +05:45 Nepal (Katmandu) |
| Asia/Dacca | UTC +06:00 Central Asia (Dacca) |
| Asia/Novosibirsk | UTC +06:00 Russian Federation - Five (Novosibirsk) |
| Indian/Cocos | UTC +06:30 Cocos Islands |
| Asia/Bangkok | UTC +07:00 Southeast Asia (Bangkok) |
| Asia/Krasnoyarsk | UTC +07:00 Russian Federation - Six (Krasnoyarsk) |
| Asia/Shanghai | UTC +08:00 Western Australia, China (Shanghai) |
| Asia/Irkutsk | UTC +08:00 Russian Federation - Seven (Irkutsk) |
| Asia/Tokyo | UTC +09:00 Korea, Japan (Tokyo) |
| Asia/Yakutsk | UTC +09:00 Russian Federation - Eight (Yakutsk) |
| Australia/Adelaide | UTC +09:30 Australia - South Australia (Adelaide) |
| Australia/Darwin | UTC +09:30 Australia - Northern Territory (Darwin) |

| | |
|---|---|
| Australia/Sydney | UTC +10:00 Australia (Sydney) |
| Australia/Brisbane | UTC +10:00 Australia - Queensland (Brisbane) |
| Asia/Vladivostok | UTC +10:00 Russian Federation - Nine (Vladivostok) |
| Pacific/Guadalcanal | UTC +11:00 Central Pacific (Guadalcanal) |
| Asia/Magadan | UTC +11:00 Russian Federation - Ten (Magadan) |
| Pacific/Fiji | UTC +12:00 Fiji |
| Pacific/Auckland | UTC +12:00 Russian Federation - Eleven, New Zealand |
| Pacific/Apia | UTC -11:00 Samoa (Apia) |
| Pacific/Tahiti | UTC -10:00 French Polynesia (Tahiti) |
| Pacific/Rarotonga | UTC -10:00 Cook Islands (Rarotonga) |
| Pacific/Gambier | UTC -09:00 Pitcairn Islands (Gambier) |
| America/Tijuana | UTC -08:00 Mexico Baja Calif Norte (Tijuana) |
| America/Mazatlan | UTC -07:00 Mexico Nayarit (Mazatlan) |
| America/Costa_Rica | UTC -06:00 Central America (Costa Rica) |
| America/Mexico_City | UTC -06:00 Mexico City |
| America/Bogota | UTC -05:00 South America - West (Bogota) |
| America/Havana | UTC -05:00 Bahamas, Cuba (Havana) |
| America/Santiago | UTC -04:00 Chile (Santiago) |
| America/Caracas | UTC -04:00 West Atlantic (Caracas) |
| America/Halifax | UTC -04:00 Bermuda, Canada Atlantic (Halifax) |
| America/Sao_Paulo | UTC -03:00 Brazil East (Sao Paulo) |
| America/Buenos_Aires | UTC -03:00 South America - East (Buenos Aires) |
| America/Godthab | UTC -03:00 Greenland (Godthab) |
| America/Noronha | UTC -02:00 Brazil Atlantic Islands (Noronha) |
| Atlantic/Cape_Verde | UTC -01:00 Eastern Atlantic (Cape Verde) |
| America/Scoresbysund | UTC -01:00 Greenland (Scoresbysun) |

## A.3 Values for user_lang_preferred Field

Table A.3 lists the possible values for the user_lang_preferred field in the SNS profile schema. The values listed are a subset of those defined by ISO 639. For more information about ISO 639, see http://www.oasis-open.org/cover/iso639a.html. A complete list of IS0 639 language codes is available at http://www.w3.org/WAI/ER/IG/ert/iso639.htm.

**Table A.3 Possible Values for user_lang_preferred in the SNS Profile Schema**

| Value | Description |
|---|---|
| zh | Chinese |
| da | Danish |
| nl | Dutch |
| en | English |
| fr | French |
| de | German |

| Value | Description |
|---|---|
| it | Italian |
| ja | Japanese |
| ko | Korean |
| pt | Portuguese |
| es | Spanish |
| sv | Swedish |

# Appendix B: SNS Milestones

The following milestone checklist helps you plan, schedule, and implement your Screen Name Service project. The estimated timelines are based on previous partner implementations. Your implementation scenario may vary.

**Table B.1 Checklist for Implementing SNS**

| Milestone | Estimated Time |
|---|---|
| Sign agreement with AOL | Time varies |
| Attend SNS overview (Have a technical/business discussion with the account manager.) | 1 day |

| | |
|---|---|
| Review implementation guide, plan and schedule project, and have a technical discussion with your Integration Engineer | 3 to 5 days |
| Notify AOL of estimated launch date | 1 day |
| Obtain UI Resource and Style Guide | 1 day |
| Create development siteId. Refer to SNS test servers in Table 3.1 for testing. | 1 day |
| Begin development | 5 to 7 days |
| Notify AOL when development and testing is completed/AOL reviews the development site | 2 days |
| AOL approves the development site (Development walkthrough) | 1 day |
| Submit request for production siteId | 1 day |
| Confirm your final launch date with AOL | 1 day |
| AOL issues production siteId | 1 to 2 days |
| Move to your production site and launch | 1 day or when partner is ready |

**Note:**

Once your site is launched, it's your responsibility to notify AOL of any changes to your production siteId. For example, if the IP addresses or cobranding is going to change, then those changes must be reflected in the siteId.

---

# Appendix C: Images for Localization

This appendix lists the URLs for the SNS sign-in and sign-out images, for supported languages. SNS hosts these images, and you must reference them in your image tags. If you have requirements that don't allow you to reference the images, contact sns-support@netscape.com.

There are two styles of images, in varying dimensions to accommodate your site's needs. The two styles are:

- The horizontal style, displaying the Screen Name logo and "sign-in" or "sign-out" side-by-side:


- The vertical style, displaying the Screen Name logo over "sign-in" or "sign-out":


Supported languages are:

- Chinese
- Dutch
- English (Australia, Canada, UK, and US)
- French (Canada)
- French (France)
- German
- Japanese
- Portuguese (Brazil, Portugal)
- Spanish (Argentina)
- Spanish (Latin American Portal)
- Spanish (Mexico)
- Spanish (Spain)

## C.1 Chinese

**Table C.1 Images for Chinese Language**

| **Sign-In Images** |  |
|---|---|
| **Height** | **Width** | **URL** |

| | | |
|---|---|---|
| 136 | 15 | http://sns-certify.web.aol.com/images/zh-cn/signin136.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/zh-cn/signin98.gif |
| **Sign-Out Images**  | | |
| 136 | 15 | http://sns-certify.web.aol.com/images/zh-cn/signout136.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/zh-cn/signout98.gif |

## C.2 Dutch

**Table C.2 Images for Dutch Language**

| **Sign-In Images**   | | |
|---|---|---|
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/nl-nl/dutch_signin_128.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/nl-nl/dutch_signin_136.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/nl-nl/dutch_signin_146.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/nl-nl/dutch_signin_80.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/nl-nl/dutch_signin_88.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/nl-nl/dutch_signin_98.gif |
| **Sign-Out Images**   | | |
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/nl-nl/dutch_signout_128.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/nl-nl/dutch_signout_136.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/nl-nl/dutch_signout_146.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/nl-nl/dutch_signout_80.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/nl-nl/dutch_signout_88.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/nl-nl/dutch_signout_98.gif |

## C.3 English

**Table C.3 Images for English Language**

| **Sign-In Images**   | | |
|---|---|---|
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/signin128.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/signin136.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/signin146.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/signin80.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/signin88.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/signin98.gif |
| **Sign-Out Images**   | | |
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/signout128.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/signout136.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/signout146.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/signout80.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/signout88.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/signout98.gif |

## C.4 French (Canada)

**Table C.4 Images for French Language, Located in Canada**

| Sign-In Images   | | |
|---|---|---|
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/fr-ca/frenchca_signin_128x15.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/fr-ca/frenchca_signin_136x15.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/fr-ca/frenchca_signin_146x15.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/fr-ca/frenchca_signin_80x31.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/fr-ca/frenchca_signin_88x31.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/fr-ca/frenchca_signin_98x31.gif |
| **Sign-Out Images**   | | |
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/fr-ca/frenchca_signout_128x15.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/fr-ca/frenchca_signout_136x15.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/fr-ca/frenchca_signout_146x15.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/fr-ca/frenchca_signout_80x31.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/fr-ca/frenchca_signout_88x31.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/fr-ca/frenchca_signout_98x31.gif |

## C.5 French (France)

**Table C.5 Images for French Language, Located in France**

| Sign-In Images   | | |
|---|---|---|
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/fr-fr/french_signin_128x15.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/fr-fr/french_signin_136x15.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/fr-fr/french_signin_146x15.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/fr-fr/french_signin_80x31.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/fr-fr/french_signin_88x31.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/fr-fr/french_signin_98x31.gif |
| **Sign-Out Images**   | | |
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/fr-fr/french_signout_128x15.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/fr-fr/french_signout_136x15.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/fr-fr/french_signout_146x15.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/fr-fr/french_signout_80x31.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/fr-fr/french_signout_88x31.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/fr-fr/french_signout_98x31.gif |

## C.6 German

**Table C.6 Images for German Language**

| Sign-In Images   |
|---|

| Height | Width | URL |
|---|---|---|
| 128 | 15 | http://sns-certify.web.aol.com/images/de-de/german_signin_128.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/de-de/german_signin_136.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/de-de/german_signin_146.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/de-de/german_signin_80.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/de-de/german_signin_88.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/de-de/german_signin_98.gif |
| **Sign-Out Images** |   |   |
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/de-de/german_signout_128.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/de-de/german_signout_136.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/de-de/german_signout_146.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/de-de/german_signout_80.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/de-de/german_signout_88.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/de-de/german_signout_98.gif |

## C.7 Japanese

**Table C.7 Images for Japanese Language**

| **Sign-In Images** |   |   |
|---|---|---|
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/ja-jp/japan_signin_128.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/ja-jp/japan_signin_136.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/ja-jp/japan_signin_146.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/ja-jp/japan_signin_80.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/ja-jp/japan_signin_88.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/ja-jp/japan_signin_98.gif |
| **Sign-Out Images** |   |   |
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/ja-jp/japan_signout_128.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/ja-jp/japan_signout_136.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/ja-jp/japan_signout_146.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/ja-jp/japan_signout_80.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/ja-jp/japan_signout_88.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/ja-jp/japan_signout_98.gif |

## C.8 Portuguese (Brazil, Portugal)

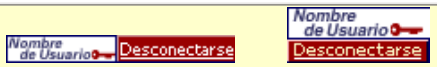
**Table C.8 Images for Portuguese Language**

| **Sign-In Images** |   |   |
|---|---|---|
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/pt-br/brazil_signin_128.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/pt-br/brazil_signin_136.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/pt-br/brazil_signin_146.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/pt-br/brazil_signin_80.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/pt-br/brazil_signin_88.gif |

| | | |
|---|---|---|
| 98 | 31 | http://sns-certify.web.aol.com/images/pt-br/brazil_signin_98.gif |
| **Sign-Out Images**   | | |
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/pt-br/brazil_signout_128.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/pt-br/brazil_signout_136.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/pt-br/brazil_signout_146.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/pt-br/brazil_signout_80.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/pt-br/brazil_signout_88.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/pt-br/brazil_signout_98.gif |

## C.9 Spanish (Argentina)

**Table C.9 Images for Spanish Language, Located in Argentina**

| | | |
|---|---|---|
| **Sign-In Images**   | | |
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/es-ar/espanolar_signin_128x15.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/es-ar/espanolar_signin_136x15.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/es-ar/espanolar_signin_146x15.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/es-ar/espanolar_signin_80x31.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/es-ar/espanolar_signin_88x31.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/es-ar/espanolar_signin_98x31.gif |
| **Sign-Out Images**   | | |
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/es-ar/espanolar_signout_128x15.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/es-ar/espanolar_signout_136x15.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/es-ar/espanolar_signout_146x15.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/es-ar/espanolar_signout_80x31.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/es-ar/espanolar_signout_88x31.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/es-ar/espanolar_signout_98x31.gif |

## C.10 Spanish (Latin American Portal)

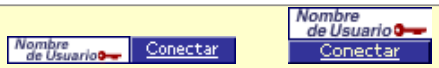
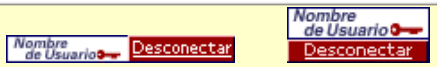
**Table C.10 Images for Spanish Language, Located in Latin America**

| | | |
|---|---|---|
| **Sign-In Images**   | | |
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/es-bz/latinam_signin_128x15.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/es-bz/latinam_signin_136x15.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/es-bz/latinam_signin_146x15.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/es-bz/latinam_signin_80x31.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/es-bz/latinam_signin_88x31.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/es-bz/latinam_signin_98x31.gif |
| **Sign-Out Images**   | | |
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/es-bz/latinam_signout_128x15.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/es-bz/latinam_signout_136x15.gif |

| | | |
|---|---|---|
| 146 | 15 | http://sns-certify.web.aol.com/images/es-bz/latinam_signout_146x15.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/es-bz/latinam_signout_80x31.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/es-bz/latinam_signout_88x31.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/es-bz/latinam_signout_98x31.gif |

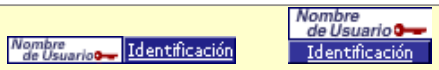
## C.11 Spanish (Mexico)

**Table C.11 Images for Spanish Language, Located in Mexico**

| Sign-In Images  | | |
|---|---|---|
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/es-mx/espanolmx_signin_128x15.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/es-mx/espanolmx_signin_136x15.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/es-mx/espanolmx_signin_146x15.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/es-mx/espanolmx_signin_80x31.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/es-mx/espanolmx_signin_88x31_.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/es-mx/espanolmx_signin_98x31.gif |
| **Sign-Out Images**  | | |
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/es-mx/espanolmx_signout_128x15.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/es-mx/espanolmx_signout_136x15.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/es-mx/espanolmx_signout_146x15.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/es-mx/espanolmx_signout_80x31.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/es-mx/espanolmx_signout_88x31.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/es-mx/espanolmx_signout_98x31.gif |

## C.12 Spanish (Spain)

**Table C.12 Images for Spanish Language, Located in Spain**

| Sign-In Images  | | |
|---|---|---|
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/es-es/espanoles_signin_128x15.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/es-es/espanoles_signin_136x15.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/es-es/espanoles_signin_146x15.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/es-es/espanoles_signin_80x31.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/es-es/espanoles_signin_88x31_.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/es-es/espanoles_signin_98x31.gif |
| **Sign-Out Images**  | | |
| **Height** | **Width** | **URL** |
| 128 | 15 | http://sns-certify.web.aol.com/images/es-es/espanoles_signout_128x15.gif |
| 136 | 15 | http://sns-certify.web.aol.com/images/es-es/espanoles_signout_136x15.gif |
| 146 | 15 | http://sns-certify.web.aol.com/images/es-es/espanoles_signout_146x15.gif |
| 80 | 31 | http://sns-certify.web.aol.com/images/es-es/espanoles_signout_80x31.gif |
| 88 | 31 | http://sns-certify.web.aol.com/images/es-es/espanoles_signout_88x31.gif |
| 98 | 31 | http://sns-certify.web.aol.com/images/es-es/espanoles_signout_98x31.gif |

# Appendix D: Error Codes

This appendix summarizes SNS error codes. Even though error codes are discussed in previous chapters, this appendix serves as a single point of reference so you can quickly locate and fix an error.

**Table D.1 List of SNS Error Codes**

| Error Code | Description | Appropriate Action |
|---|---|---|
| **User-related internal errors** | | |
| 1 | Could not load user record | Report the error to sns-support@netscape.com. |
| 2 | Could not save user record | Report the error to sns-support@netscape.com. |
| 3 | Could not delete user record | Report the error to sns-support@netscape.com. |
| 4 | Unexpected user account type | Report the error to sns-support@netscape.com. |
| 9 | Miscellaneous internal user error | Report the error to sns-support@netscape.com. |
| **Site-related internal errors** | | |
| 10 | SNS internal error, could not load site configuration record | Redirect to fallback registration page at your site. Contact your Integration Engineer for more information. |
| 11 | Could not save site record (database error) | Report the error to sns-support@netscape.com. |
| 12 | Could not delete site record | Report the error to sns-support@netscape.com. |
| 13 | Could not save site record (invalid record contents) | Report the error to sns-support@netscape.com. |
| 14 | Could not modify site record -- invalid password | Report the error to sns-support@netscape.com. |
| 15 | Could not modify site record (no set***() methods were called) | Report the error to sns-support@netscape.com. |
| 16 | Could not do x-domain authentication replication | Report the error to sns-support@netscape.com. |
| **Miscellaneous internal errors** | | |
| 20 | Invalid number of plugin function arguments | Redirect user to your site's welcome page or error page. Make sure that your self-submitting form submits only profile fields and values defined in "SNS User Profile Fields" in Appendix A. |
| 21 | Invalid plugin function argument(s) | Redirect user to your site's welcome page or error page. Make sure that your self-submitting form submits only profile fields and values defined in "SNS User Profile Fields" in Appendix A. |
| **Miscellaneous** | | |
| 90 | Invalid attribute name | Redirect user to your site's welcome page or error page. Make sure that your self-submitting form submits only profile fields and values defined in "SNS User Profile Fields" in Appendix A. |
| 91 | Invalid attribute value | Redirect user to your site's welcome page or error page. Make sure that your self-submitting form submits only profile fields and values defined in "SNS User Profile Fields" in Appendix A. |
| 92 | Error initializing server | Report the error to sns-support@netscape.com. |
| 98 | Version is not supported | Report the error to sns-support@netscape.com. |
| 99 | Miscellaneous / unknown error | Report the error to sns-support@netscape.com. |
| **Security site errors** | | |
| 101 | Site error, invalid IP address making request | Redirect user to your site's welcome page. Check your Partner Configuration file. The IP address of server requesting validation must be listed in siteServerIps and server must be in domain specified in siteDomain. Contact your Integration Engineer to update your Partner Configuration, if necessary. Make sure that your self-submitting form supplies the required arguments. |
| **API site errors** | | |
| 110 | Site error, invalid or missing API arguments (for example siteProfMod or mcProfMod) | Redirect user to your site's welcome page or error page. Make sure that your self-submitting form submits only profile fields and values defined in "SNS User Profile Fields" in Appendix A. |

| | | |
|---|---|---|
| 111 | Site error, invalid profile data input from site (for example, invalid country code) | Redirect user to your site's welcome page or to an error page. |
| 112 | Invalid siteId | Verify the siteId is spelled correctly; if the error persists report it to sns-support@netscape.com. |
| 113 | Missing siteId | Include the siteId as the query string. |
| 114 | Direct profile read/write access attempted by non-internal site | Do not attempt direct read/write. |
| 115 | Direct profile write access attempted by internal site to non-writable (to site) profile attributes | Do not attempt direct read/write. |
| 116 | Missing / unable to access field in site configuration | Make sure the field is specified in the siteId. |
| 117 | Character encoding of incoming profile data (from site) does not match that of user's SNS profile | Use compatible encoding. |
| 118 | Character encoding of user's SNS profile not acceptable to site | Use compatible encoding. |
| 120 | Invalid Authorization Level | Review your site configuration and modify the Site Auth Lev field. |
| **Security user errors** | | |
| 201 | User error, token expired | Redirect user to mcLoginUrl automatically or by presenting user with the sign-in image. |
| 202 | User error, token invalid or corrupted | Redirect to your site's welcome page. Check configuration to make sure that your site is passing the correct siteID. Contact your Integration Engineer to update your Partner Configuration, if necessary. |
| 203 | Could not determine requestor's IP address | Specify a valid IP address format. |
| 204 | Authentication failed because of invalid screenname or password | Specify a valid screenname and password. |
| 205 | Request failed because log in occurred too many times from that user or IP address | Report the error to sns-support@netscape.com. |
| 206 | The account requires securId for authentication | Application must accept securID to authenticate the user. |
| 207 | Account requires next securID | Application must pass requestId with next securId authentication request. |
| 208 | Temporary IP rate limit exceeded | Report the error to sns-support@netscape.com. |
| 209 | Lifetime email rate limit exceeded | Report the error to sns-support@netscape.com. |
| **Other user errors** | | |
| 210 | User error, user not currently signed in to SNS. | Redirect user to your site's welcome page or an error page. |
| 211 | User error, user parental control restriction | Redirect to your site's welcome page. |
| 212 | User's browser does not have cookies enabled | Redirect user to your site's welcome page or to an error page |
| 213 | User's browser does not have Javascript enabled | Redirect user to your site's welcome page or to an error page. |
| 214 | User is under age according to COPPA guidelines (under 13) | Redirect to your site's welcome page. |
| 215 | User is logged in but auth level is not high enough | Report the error to sns-support@netscape.com. |
| 216 | Screenname is already taken | Choose a different screenname. |
| 217 | User is not authenticated at the specified level. | Redirect user to your error login page. |
| Any Other | Any other error returned by SNS | Redirect to your site's welcome page. Check configuration to make sure that your site is passing the correct siteID. Contact your account representative to update your Partner Configuration, if necessary. |

# Appendix E: Sample Code

This appendix provides sample code for the following tasks:

- Initiating Profile Synchronization
- Login Process
- Logout Process

The code examples assume a demo siteId, fooDev, which has the following configuration:

| Field | Description |
|---|---|
| siteId | fooDev |
| siteDomain | foo.com |
| siteServerIps | 218.11.51.11 - 218.11.51.11 |
| siteLoginUrl | http://mymachine.foo.com/examples/jsp/savvysite/mclogin.jsp?siteId=fooDev |
| siteLoginFailUrl | http://mymachine.foo.com/examples/jsp/savvysite/mcloginfail.jsp?siteId=fooDev |
| siteLoginCancelUrl | http://mymachine.foo.com/examples/jsp/savvysite/mclogincancel.jsp?siteId=fooDev |
| siteLogoutUrl | http://mymachine.foo.com/examples/jsp/savvysite/mclogout.jsp?siteId=fooDev |
| siteLogoutFailUrl | http://mymachine.foo.com/examples/jsp/savvysite/mclogoutfail.jsp?siteId=fooDev |
| siteLogoutCancelUrl | http://mymachine.foo.com/examples/jsp/savvysite/mclogoutcancel.jsp?siteId=fooDev |
| siteProfSyncUrl | http://mymachine.foo.com/examples/jsp/savvysite/mcprofsync.jsp?siteId=fooDev |
| siteProfSyncFailUrl | http://mymachine.foo.com/examples/jsp/savvysite/mcprofsyncfail.jsp?siteId=fooDev |
| siteProfSyncCancelUrl | http://mymachine.foo.com/examples/jsp/savvysite/mcprofsynccancel.jsp?siteId=fooDev |

# E.1 Initiating Profile Synchronization

In this section we cover the steps for initiating Profile Synchronization. Profile Synchronization is needed when either the Screen Name Service or the partner updates the user profile. If SNS has the updated data then follow all the steps. If the partner has an Edit Profile link in the application and the user selects a field that is shared between the partner and SNS, then the partner can initiate profile synchronization and can skip steps 1 and 2.

Refer to SNS User Profile Fields for a list of the central set of profile data fields stored by SNS.

1. Do a server-to-server authentication to retrieve the user's: screenname (sn), timestamp (lmts), and display name (disSn).

2. Compare the user's local timestamp to the timestamp available from SNS. Include the following code in your siteLoginUrl Handler to compare timestamps:

   ```
   If varLmts > objRS("stampcheck") Then' Check if the data at the SNS site is more recent
   than the local data
   ```

   To determine whether a profile synchronization is necessary, the handler determines whether the last-modified timestamp of the SNS profile, obtained from the SNS site is greater (more recent) than the timestamp stored in the user's local record.

3. If the result of the condition in Step 2 is true, then a profile synchronization is needed. The partner can either use an existing token or initiate a server-to-server call to: mcProfTokGenUrl. When making this request, you must pass your siteId and the screenname (sn) of the user for whom you want to generate a token.

   ```
   dim URL2, oHttp2, result2, varAuthTok
   set oHttp2 = Server.CreateObject("MSXML2.ServerXMLHTTP")
   URL2= "http://sns-certify.web.aol.com/_cqr/mcProfTokGenUrl.psp?siteId=madd_tips&sn="

   URL2= URL2 & varSn
   oHttp2.open "GET", URL2, false
   oHttp2.send() 'Send the request to SNS

   if oHttp2.status = 200 then 'Check to see if we got back a savvy response from SNS
   ```

   A successful request returns a response of 200 from SNS and generates a short-lived authentication token that you pass as a parameter within your self-submitting form. The form of this response is:

```
authTok=authTok
```

where *authTok* is the actual authentication token.

4. Parse this response and save the value of the *authTok* into a variable. In the following example, the value of the token is saved into a variable called varAuthTok.

```
result2 = oHttp2.responseText 'save the string in a variable for parsing
result_length2 = len(result2)
authTokstart = Instr(result2,"authTok")
varAuthTok = right(result2,(result_length2 - (authTokstart+7)))
```

5. To initiate a Profile Synchtonization, generate a self submitting form that passes your siteProfMod, mcProfMod, siteId, siteState, local profile data, *and* your generated authentication token.

   You must pass the authentication token as 'mcAuth' or you will recieve an error=110, which flags any missing expected arguments.

```
<html>
<head>
<TITLE>Madd Tips - Existing User Prof Sync</TITLE>
</head>
<script language="JavaScript">
<!--
function subform () { document.proform.submit(); }
// -->
</script>
<body onLoad="subform ();">
<form name="proform" method="POST" action="http://sns-
certify.web.aol.com/_cqr/sync/start.tmpl">
<input type="hidden" name="siteId" value="madd_tips">
<input type="hidden" name="siteState" value="update">
<input type="hidden" name="siteProfMod" value="1">
<input type="hidden" name="mcProfMod" value="0">
<input type="hidden" name="mcAuth" value="<%=varAuthTok%>">
<input type="hidden" name="user_name_first" value="<%=objRS("fname")%>">
<input type="hidden" name="user_name_last" value="<%=objRS("lname")%>">
<input type="hidden" name="user_home_postal_street_line1" value="<%=objRS("address")%>">
<input type="hidden" name="user_home_postal_city" value="<%=objRS("city")%>">
<input type="hidden" name="user_home_postal_stateprov" value="<%=objRS("state")%>">
<input type="hidden" name="user_home_postal_postalcode" value="<%=objRS("zip")%>">
<input type="hidden" name="user_home_online_email" value="<%=objRS("email")%>">
</form>
</body>
</html>
```

6. If your siteLoginUrl handler does not perform the profile synchronization described in the previous step, then the handler should redirect the user to the appropriate URL on your site, as a registered, signed-in user. (If the handler does perform the optional step described above, then this action is performed by the siteProfSyncUrl handler instead.)

## E.2 Login Process

The login process has the following steps:

1. A user clicks on the login link on the foo site which points to the SNS server's login URL (mcLogin along with the siteId fooDev (http://my.screenname.aol.com/login.psp?siteId=fooDev).
2. The SNS server presents the UI for login and password (assuming the user is not already logged in).
3. An encrypted, short-lived token is generated and is posted on the loginUrl of the the siteId fooDev as above.
4. The handler sends the token back via server-to-server to a different URL on the SNS site (mcLoginTokVal.tmpl).
5. The SNS site sends the user's Screen Name along with a last modified timestamp for the user profile.
6. If auto-registration is enabled, then the user profile info is posted to the profSynchUrl of the partner site. (Assume that auto-registration is disabled.)

7. Partner sets a local cookie to identify the user as a AOL user.

### JSP code snippet for server to server login

```
    <html>
    <head>
    <TITLE>SNS Test Tool -- Get Sn</TITLE>
    </head>

        <%@ page language="java"
import="java.net.*,java.io.*,java.util.*,javax.servlet.http.*"%>
<%


           int igoterror = 0;
           mcAuth = request.getParameter("mcAuth");
           lSiteId = request.getParameter("siteId");
           urlString = "http://sns-certify.web.aol.com/_cqr/mcLoginTokVal.tmpl";
           urlString += ("?mcAuth=" + mcAuth);
           urlString += ("&siteId=" + lSiteId);
           out.println("McAuth before Server to Server" + mcAuth);

           // do server to server to for auth verficiation
           // ---------------------------------------------

           URL url = new URL(urlString);
           URLConnection connection = url.openConnection();
           DataInputStream inStream = new DataInputStream(connection.getInputStream());

           while (null != (currentLine = inStream.readLine())) {
            out.println("-- " + currentLine);
           if (currentLine.startsWith("sn="))
            {
             mcData = currentLine;
             igoterror = 1;
             }
           }
           inStream.close();
           inStream = null;


           // if there were no errors in getting screename then only do this

            if ( igoterror == 1 ) {

           // strip out the sn and lmts (there may be additional fields added)
           // --------------------------------------------------------------------------
---

           int snLength = mcData.indexOf("&");
           if (snLength >= 0) {
           sName = mcData.substring(3, snLength);
           int lmtsLength = snLength + 6;
           lmts = mcData.substring(lmtsLength);
           lmtsVal = Integer.valueOf(lmts).intValue();
            }
           }

        %>
```

# E.3 Logout Process

The logout process has the following steps:

1. A user clicks on the logout link on the foo site which points to the SNS server's logout link, along with the siteId (http://my.screenname.aol.com/logout.tmpl?siteId=fooDev).

2. SNS server calls foo's logout handler which does the following:
3. Deletes any partner specific local cookie
4. Redirects the user to an succimageUrl on the SNS site.

## Code snippet for logout

```
{
   String siteId = request.getParameter("siteId");
   String cookiePrefix = null;
   String cookieName = null;
   cookiePrefix = "MY_Local_Cookie";
   cookieName = cookiePrefix.concat(siteId);
   Cookie cookie = new Cookie(cookieName, "NULL");
   response.addCookie(cookie);

    String redirUrl = "http://sns-certify.web.aol.com/images/logged_out.gif"
     + "?siteId=" + siteId;
    response.sendRedirect(redirUrl);
   } catch (Exception e) {
      out.println(e);
   }
```

---