iconectiv[®]

SHAKEN Policy Administrator

Secure Telephone Identity (STI) Service Provider Methods and Procedures

STI-PA Release 2.2

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Executive Summary

This document provides the guidelines and procedures to be followed by VoIP Service Providers (SPs) for enrollment in the Signature-based Handling of Asserted Information Using toKENs (SHAKEN) ecosystem as introduced in [ATIS-1000074]. [ATIS-1000080] and [ATIS-1000084] provide the details on the Service Providers roles and responsibilities for interacting with the STI Policy Administrator (STI-PA). [ATIS-1000093] describes the support for RespOrgs. This document provides the detailed procedures to be followed by the Service Provider in order to participate in the SHAKEN ecosystem.

1 Introduction

This document describes the process for the approval and enrollment of a Service Provider in the SHAKEN ecosystem. The STI-GA, an industry group under the auspices of the Alliance for Telecommunications Industry Solutions (ATIS), provides a venue for service provider collaboration in establishing the overall governance to ensure that only approved service providers are enrolled in the SHAKEN ecosystem. The STI-GA has established the policy that a Service Provider must have an Operating Company Number (OCN) in order to participate in the SHAKEN ecosystem. To participate, a Service Provider must create an account with the STI-PA. Once the account is created, the Service Provider then has the credentials to interface to the STI-PA to obtain a Service Provider Code Token and link to the Certificate Revocation List, as detailed in [ATIS-1000080].

These guidelines are provided as a job aid and user guide.

2 Contact Information

iconectiv STI-PA Administrator (Customer Support):

100 Somerset Corporate Blvd. Phone: 1.800.458.4826

Bridgewater, NJ 08807 E-mail: STI-PA@iconectiv.com

iconectiv PMA Director:

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3 Service Provider Registration

The SP must first complete and submit a registration form on the STI-PA website to be a participant in the SHAKEN ecosystem.

The details for the account registration are in section <u>7.1 Registering for a Service Provider</u> Account.

Once registration information is received, the SP will receive an email indicating the STI-PA Administrator (STI-PA Admin) has received the application and is currently reviewing it for completeness. The STI-PA Admin will contact the SP for additional information required to complete their account registration as defined in the STI-GA SPC Token Access and Funding Policy*.

❖ See *Note below item #2 in the next section.

❖ Special Note:

A company that is both **RespOrg and Service Provider** [with an assigned **OCN**] *shall always register as Service Provider*.

Based on the STI-GA policies an account registered as a Service Provider can request SPC Tokens for both their RespOrg and a Service Provider; however, if they register as a RespOrg, they will only be able to request SPC Tokens for a RespOrg ID and not for an OCN.

4 Service Provider Approval

The STI-PA Admin is responsible for ensuring timely review of the Service Provider's registration submission, and for contacting the SP to complete the registration process. The expected turnaround is 2-3 business days.

Below is the information you will be asked to provide to the STI-PA to obtain an SPC Token and gain access to the system.

4.1 Provide Information to the STI-PA Administrator

- SP must have an Operating Company Number (OCN) that is eligible for Numbering Resource assignments.
 - The OCN will be entered directly on the registration form.
 - OCN format must be 4 character Codes that have a numeric value in the first position.
 - Valid format example: 495j
 - Invalid format example: G141

- The OCN will be used to verify the SP has direct access to telephone numbers from the North American Number Plan Administrator (NANPA) and National Pooling Administrator (NPA).
- Have a current FCC Form 499A on file with the FCC (filed by all intrastate, interstate, and international providers of telecommunications (including VoIP providers) within the United States). The STI-PA will validate current 499A filing status of the SP with the FCC but per the STI-GA funding policy.
 - Per the STI-GA funding policy, SPs are required to provide the aggregate revenue dollar amount from lines 423 or 514 (Column A), whichever is greater, to the STI-PA Admin.
 - This information is required in order to calculate the annual fee for your SP account.
 - You will not be permitted to use the Policy Administrator services until this information is provided.
 - ❖ **Note**: The above SP information requirements are based on decisions set in the *STI-GA Policy Decisions Binder* (click on this link to view the latest version).
- 3. Any additional OCNs and RespOrg IDs that the SP wishes to request SPCs with
- 4. SPC Token Expiry timer value
- 5. Billing information
- 6. IP addresses for whilelisting for production and staging.

4.2 Test for Readiness in the STI-PA Staging Environment

❖ Note: If you are working with a Certified Vendor, you do not need to go through these steps.

The SP will need to go through the Readiness Evaluation Test Plan Iss 2 within the STI-PA Staging environment prior to accessing the STI-PA Production environment.

The SP must submit results from the completed Readiness Evaluation Test to the STI-PA Admin for readiness evaluation. Once deemed ready, the STI-PA Admin will notify the SP by email with login instructions to the Production environment.

5 Adding a Service Provider to the SHAKEN Ecosystem

Once an SP has been approved, the SP is notified via email. The SP must follow the procedures in Section 7.2 [Activating the Service Provider Account] to log into the STI-PA portal. The procedures in section 7.4 [Obtaining SPC Tokens] are required in order for an SP to establish the credentials that allow them to use the automated mechanism (API) in order participate in the SHAKEN ecosystem, as described in [ATIS-1000080].

6 Procedures for Company Name Change, Business Termination or Sale

Once an SP has been added to the ecosystem they must notify the STI-PA of any company name changes, including those related to sales. The SP must also notify the STI-PA if the company terminates business or the SP chooses to no longer be a part of the SHAKEN ecosystem.

- In the case of a company name change, whether it be due to a sale or other legal or marketing reasons, the SP must notify the STI-PA Admin to have their account updated to reflect the name change.
- If business changes result in the need to consolidate OCNs or RespOrg IDs that result in other changes to an account (e.g., merging accounts for example) the SP should notify the STI-PA Admin.
- If a business terminates, the SP must notify the STI-PA so that the account can be deactivated.

7 Account Management

7.1 Registering for a Service Provider Account

A onetime registration is required for your company to become an authorized SHAKEN Service Provider company. Your company account authorizes usage of the STI-PA to all OCNs and RespOrg IDs operating within your company; however, these must be configured as individual Service Provider Codes under the main account.

Registering for a STI-PA Account is a 2-part process:

- 1. Complete the registration form on the STI-PA website and verify your contact email address.
- 2. Provide additional information to the STI-PA Admin, who will contact you to complete the registration.

Once registration is complete and your company account is approved, you will receive an email with instructions for accessing the initial login, accepting the Account Level Agreement, and establishing a password. You will be able to begin using the STI-PA as well as add new users for registered Service Providers and RespOrgs in your company.

Instructions to register on the STI-PA website:

1. Open a browser window and go to the Policy Administrator website:

https://authenticate.iconectiv.com

Recommended browser:

- Google[®] Chrome
- Click the PROVIDER → GET STARTED link on the page header, or the GET STARTED (
 GET STARTED) button below the Provider Registration section of the same page to go to the Provider Registration page.
- 3. Click on the **BEGIN REGISTRATION** (button at bottom of the page to go to the registration page. See <u>Figure 1</u> below.
- 4. Select the Service Provider account type.
 - The STI Participant ID fields for Service Provider will display.
 - Provide your company's OCN in the text box provided.

NOTE: Only 1 OCN is required at registration.

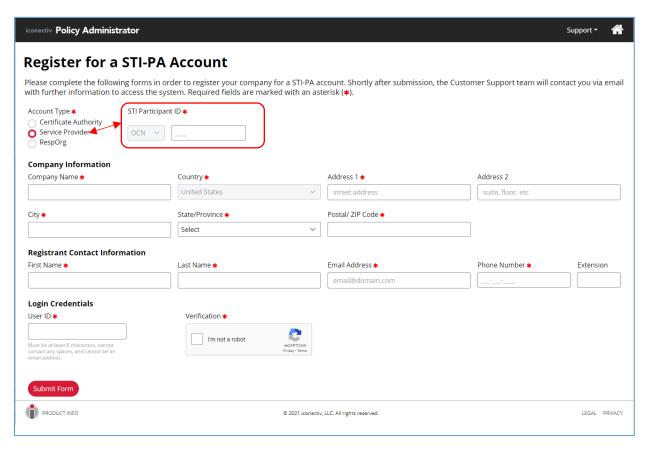


Figure 1 Registration Page - Select Service Provider to display the STI Participant ID fields

Complete all required (*) fields on the form, using correct formats as per noted.

IMPORTANT NOTES:

- ◆ Company Information The Company Name field cannot contain the colon (:) character. Suggested alternatives are: dash (-), underscore (), or period (.)
- Login Credentials Write down the User ID separately as you will need this ID to log into the STI-PA web application. This will be the SP Admin User ID for your company's PA account.
- 6. Click the **I'm not a robot** checkbox next to the User ID field (and any additional prompt(s) that may display), then click the **Submit Form** (button.

 Upon successful form validation, a success message will display with information on the next step to completing the registration process.
- 7. Verify Registrant Contact Email Address.

Check the mailbox of the Email Address indicated in the success message for the email sent from **STI-PA Do Not Reply** containing the email verification link.

- Note: You may need to search for the email in your *Junk* mailbox.
- You must click on the link in the email prior to its expiry.
- If you are unable to complete the verification prior to code expiry, contact the STI-PA
 Admin as noted in section 2 [Contact Information] of this document to send a new
 verification email.
- 8. Complete the Email Verification by clicking the link in the email.

A **Success** message will display if you complete the verification prior to link expiry. You will receive an email explaining the review and registration completion process.

7.2 Activating the Service Provider Account

Once registration is approved, the SP will receive an email containing the temporary password and link to the STI-PA login page.

- 1. Using the **SP Admin User ID** created on the registration form as login ID and the password provided in the email, fill in the login fields and click the Log In button.
 - The SP Admin user will be prompted change the password before they can log in for the first time.
 - Password Guidelines:
 - Must be length of 8-99 characters
 - Must have at least one number 0-9
 - Must have one lower case letter a-z
 - Must have one upper case letter A-Z
 - Must include one of the following special characters: ^\$*.[[{}()? -"!@#%&/\,><':;| ~`
- Following password change the SP Admin user will be required to accept both the Account Level Agreement, and Service Provider Annual Fee Agreement* in order to activate their account in the STI-PA.
 - ❖ Notes:
 - For information on how pricing is determined, please refer to Funding Methodology in the STI-GA policy page using the link below:
 - https://www.atis.org/sti-ga/resources/
 - ii. Service Providers who are required to, but have not submitted their FCC Form 499-A will not be presented with the Service Provider Annual Fee Agreement for acceptance; until they have submitted their form to the STI-PA Admin.



Once the account is activated, the account portal allows an SP to update any contact information, add users as well as to notify the STI-PA of any revoked certificates per section <u>7.5</u> [Adding Revoked Certificates to the CRL]. Online Help Pages will be available to guide you in your tasks.

7.3 Paying the Annual Fee

The Policy Administrator sends annual fee invoices to its participating Service Provider Accounts via email once or twice a year, depending on the account's activation date in the STI-PA. Once the account is activated in the STI-PA (see section 7.2 [Activating the Service Provider Account] above), the STI-PA will establish the account in its billing system and email an invoice using the email address from the company's billing contact on file.

Payment for the account can be rendered on the STI-PA Payment Portal by the Billing Admin User(s) on the account.

❖ Notes:

- The Billing Admin User is any admin user with *Invoice Payment Permission*.
- The first Admin User on the account is granted the permission by default, and can grant the permission to subsequent Admin Users added to the account.
- Details on how to manage Invoice Payment Permission for other Admin Users can be found on the STI-PA website's Online Help page under Manage Users-Add/Edit Users topic.

To Make a Payment:

- 1. Log into the STI-PA Website.
- 2. Click the Make a Payment (button on the Account Profile page. This is the landing page following successful login to the STI-PA website.
- 3. The system will automatically log you into the payment portal, which will open in a new browser tab. (See important usage notes below.)

❖ Important Usage Notes:

- Make sure the pop-up blocker is disabled in your browser settings.
- For new accounts, there may be a delay (24 72 hours) in the establishment and activation of the account in the Payment Processing system.
 - If your account is not yet set up for payment processing, an error message will advise you to wait and try again at a later time.
- The payment portal has an inactivity timer which will automatically log the user off once the threshold is reached. *The inactivity threshold is currently set for 15 minutes*.

- The STI-PA provides the flexibility of establishing multiple Billing Admin Users per account; however, concurrent payment portal sessions are not supported. It is recommended that if multiple Billing Admin Users have been configured, that these users should avoid establishing payment portal sessions simultaneously.
 - The STI-PA will display a warning message to the billing admin user if another user may still be logged in, providing the option to continue or cancel.
 - In the event that simultaneous sessions are established, the application will automatically disconnect one of the users from the portal.
- Please contact the iconectiv Customer Support (see <u>Contact Information</u>) for additional payment portal access and usage assistance.

7.4 Obtaining SPC Tokens

Once the account is activated, the SP must create additional credentials that are used to authenticate access when the SP is using the automated mechanism (API) for requesting SPC tokens. Note, that the SPC tokens are required to obtain certificates in the SHAKEN ecosystem per the procedures defined in [ATIS-1000080]. When an SP requests an SPC token using the API, they are also provided a link to the Certificate Revocation List (CRL).

The SP uses the same credentials in order to obtain the list of Trusted STI-CAs, which is required to validate certificates by the SP to which a call terminates in the SHAKEN ecosystem.

7.5 Adding Revoked Certificates to the CRL

Once the SP has an active account, they are able to use the account to provide the STI-PA with any certificates that have been revoked. *The SP must notify the STI-PA of all known revoked certificates as soon as possible.* This does not apply to delegate certificates. Delegate certificates will not be included on the CRL.

7.6 Account Maintenance

It is the responsibility of the SP to keep their accounts updated, in particular contact information. If an SP fails to do so, the STI-PA reserves the right to deactivate the SP's account until updated contact information is provided.

8 Glossary

ACRONYM	<u>Meaning</u>
ATIS	Alliance for Telecommunications Industry Solutions
CA	Certification Authority
СР	Certificate Policy
CPS	Certification Practice Statement
CRL	Certificate Revocation List
OCN	Operating Carrier Number
SP	Service Provider
RespOrg	Responsible Organization
STI-CA	Secure Telephone Identity Certification Authority
STI-GA	Secure Telephone Identity Governance Authority
STI-PA	Secure Telephone Identity Policy Administrator

9 References

- ATIS-1000074 Signature-based Handling of Asserted Information using Tokens (SHAKEN)
- ◆ ATIS-1000080 Signature-based Handling of Asserted Information using Tokens (SHAKEN): Governance Model and Certificate Management
- ATIS-1000084 Technical Report on Operational and Management Considerations for SHAKEN STI Certification Authorities and Policy Administrators
- ♦ ATIS-1000093 ATIS Standard on Toll-Free Numbers in the SHAKEN Framework



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