CTEN Exchange Policies and Procedures

<table>
<thead>
<tr>
<th>Subject</th>
<th>Procedure for Onboarding for Treatment, Payment, and Operations</th>
</tr>
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<tbody>
<tr>
<td>Status</td>
<td>Approved by CIC</td>
</tr>
<tr>
<td>Procedure</td>
<td>EPP-9</td>
</tr>
<tr>
<td>Effective</td>
<td>15 September 2017</td>
</tr>
<tr>
<td>Version</td>
<td>1.0</td>
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I. **Purpose**

This procedure defines the process for onboarding an organization to the California Trusted Exchange Network (CTEN) for transactions for purposes of treatment, payment, or health care operations and administering the Services Registry that defines conformance to a Trust Profile associated with exchange for purposes of treatment, payment, or health care operations.

II. **Responsibilities**

A. **California Interoperability Committee (CIC)**
   - Inform the CTEN Administrator when an organization has been determined to meet all requirements of a Trust Profile and request that they be added to the Services Registry.

B. **California Trusted Exchange Network Administrator**
   - Maintain the Services Registry.
   - Add new entries to the Services Registry when requested by the CIC.
   - Remove entries from the Services Registry when requested by the CIC.
   - Inform all CTEN Participants and members of the CIC of changes to the Services Registry.

C. **Participant**
   - Work with the CTEN Administrator to incorporate the entity’s service endpoints and corresponding digital certificates, if applicable, in the Services Registry.
   - Complete testing.
   - Install or update digital certificates, as appropriate, when alerted to updates by the CTEN Administrator.
   - Consult the Services Registry regularly for service endpoints, including when alerted to updates by the CTEN Administrator.
III. Procedure

This procedure comprises two parts:

1. The procedure for adding a new Participant or Participant endpoint(s) to the Services Registry, and
2. The procedure for removing a Participant or Participant endpoint(s) from the Services Registry.

The Services Registry comprises the technical component of participation in the CTEN for all transactions for purposes of treatment, payment, or health care operations.\(^1\) Therefore, the procedures for adding participants to and removing participants from a transaction on the CTEN equates to the procedures for adding entries to and removing entries from the Services Registry.

A. Adding a Participant to a Trust Profile

Precondition: A candidate Participant has submitted an application to the CIC to be added to a Trust Profile, and has been vetted successfully.

Post-condition: The Participant has appropriate entries in the Services Registry.

1. The CIC determines that a candidate Participant has met the policy and process requirements for a Trust Profile and that its service endpoint(s) and corresponding digital certificate(s), if applicable, should be added to the Services Registry.

Rationale: The CIC has the sole authority to determine whether a candidate Participant meets the policy and process requirements of a Trust Profile.

2. The CIC identifies an administrative point of contact (POC) within the candidate Participant for all communications regarding Services Registry management, along with an email address that is regularly monitored by that POC.

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\(^1\) Specific transactions, including some transactions for purposes of treatment, payment, or health care operations, may supersede this procedure. At the time of this writing, CTEN Procedure EPP-3 Onboarding for Direct Messaging uses Trust Bundles rather than the Services Registry for the technical component of participation in the CTEN.
Rationale: Notification of changes to the Services Registry will be communicated through email. The name and contact information of the POC, including an email address, should be collected by the CIC as part of the application process of a candidate Participant.

3. The CIC identifies a testing POC within the candidate Participant for testing, along with an email address that is regularly monitored by that POC.

Rationale: Each candidate Participant is required to test with Participants of the CTEN. The name and contact information of the POC, including an email address, should be collected by the CIC as part of the application process of a candidate Participant.

4. The CIC contacts the CTEN Administrator instructing the Administrator to add the new Participant’s service endpoints to the Services Registry, providing the contact information of the administrative and testing POCs.

Rationale: It is desirable for CAHIE to define a single point of contact – the CTEN Administrator – to manage the process for Service Registry administration.

5. The CTEN Administrator contacts the administrative POC of the new Participant via Confirmed Receipt Email requesting that details of the service endpoint(s) and corresponding digital certificate(s), if appropriate, for exchange services be provided by return email. If the organization maintains a staging/testing system as well as a production system, the service endpoints and corresponding digital certificates are requested for both.

Rationale: The presence of an organization’s service endpoints in the Services Registry is the sole technical indication of a Participant’s participation in the CTEN and conformance with the policies and procedures of a Trust Profile.

Noteworthy: Since the digital certificate requested is a public key, strong security is not required to transport it.

6. Each digital certificate is inspected by the CTEN Administrator to verify conformance with requirements identified in CAHIE policies, if any. If defects are identified, the CTEN Administrator contacts the CIC to report the failure and contacts the administrative POC to correct the defect(s) and resubmit the digital certificate(s).
Rationale: This may be the first technical check on meeting digital certificate requirements identified in policies and processes for a Trust Profile, and issues should be reported to the CIC. It is desirable to correct any defects before proceeding to technical testing.

Noteworthy: A defect in the digital certificate may indicate a deviation from policy and process requirements. The CIC should determine whether failure at this step indicates that new Participant status should be revoked and this procedure should be halted.

7. The CTEN Administrator adds the service endpoint(s) and digital certificate(s), if appropriate, designated by the new Participant to be used for testing to the Services Registry and marks them with a status of “test”.

Rationale: Testing with other members of the CTEN is required to verify that the new Participant can interoperate with other Participants.

Noteworthy: Production systems may have access to protected health information (PHI). Each organization should consider carefully what service endpoint(s) are included in the Services Registry and marked for testing purposes.

8. The CTEN Administrator adds the service endpoint(s) and digital certificate(s), if appropriate, designated by the new Participant to be used for production to the Services Registry and marks them with a status of “suspended”.

Rationale: CTEN Participants should only be using service endpoints with a status of “active” for production exchange. Adding service endpoints marked with a status of “suspended” provides placeholders for entries that are temporarily inactive.

9. The CTEN Administrator sends an email to the administrative POC of the new Participant alerting them that the Services Registry has been updated and testing may proceed.

10. The CTEN Administrator sends testing POC contact information for all Participants of the CTEN to the testing POC of the new Participant.

Rationale: It is the responsibility of the new Participant to conduct testing.
Noteworthy: The CTEN Administrator must maintain a list of the testing POCs for all Participants of the CTEN.

11. The new Participant coordinates with Participants of the CTEN to conduct testing with at least two members with vendors different than the new Participant, where possible.

Rationale: Testing with other Participants of the CTEN that use different vendors and therefore, presumably, independent implementations provide a reasonable assurance that all standards have been implemented appropriately, and that the new Participant will be able to interoperate with most, if not all, other Participants of the CTEN.

12. The testing or administrative POC of the new Participant completes a testing report and sends it to the CTEN Administrator via email to confirm that testing is complete.

13. The CIC determines that a candidate Participant has met the testing requirements for the CTEN and should enter production as a Participant.

Rationale: The CIC has the sole authority to determine whether a candidate Participant meets the testing requirements for participation in the CTEN.

Noteworthy: At this point, a candidate Participant has met all of the criteria for participation in the CTEN and is therefore a Participant.

14. The CIC informs the CTEN Administrator that the new Participant is ready to enter production.

15. If the production service endpoint(s) of the new Participant were designated for use in testing and the new Participant wishes to have them removed, the CTEN Administrator removes those entries from the Services Registry.

Rationale: Production systems may have access to PHI. It is not desirable to continue to enable exchange between production systems and staging/testing systems that may have reduced security in place.

16. The CTEN Administrator marks the production service endpoint(s) in the Services Registry a status of “active”.

17. The CTEN Administrator sends an email to the CIC and the administrative POCs of all Participants of the CTEN, including the newly added organization, alerting them that the
Services Registry has been updated. The CTEN Administrator contacts the CAHIE website administrator to add the new Participant to the list of Participants of the Trust Profile.

*Rationale:* CTEN policy calls for an organization to check the Services Registry regularly for updates to service endpoints and digital certificates. Email will be used to contact the administrative POCs to ensure that all members of the CTEN update their trust stores and services registries promptly.

*Noteworthy:* The CIC is alerted simply so they may monitor updates to the Services Registry.

18. The administrative POCs of all Participants of the CTEN ensure that their trust stores and local services registries are updated.

*Rationale:* This update ensures that the local cache of service endpoints and digital certificates, should a Participant maintain one, is updated from the Services Registry.

*Noteworthy:* The Services Registry allows for an organization to check for service endpoints regularly to ensure use of new or updated information. Members of the CTEN may implement a manual process.

The following flow chart illustrates the procedure for adding a new Participant to a Trust Profile. Numbers within individual steps in the flow chart reference numbered steps in the above procedure.
Add Participant to Trust Profile

<table>
<thead>
<tr>
<th>CIC</th>
<th>CTEN Administrator</th>
<th>New Participant</th>
<th>Existing Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Vets new Participant against Policy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2-3) Obtains POC information</td>
<td>(5) Requests service endpoint(s) of new Participant (via email)</td>
<td>Returns service endpoint(s) and certificate(s) (via email)</td>
<td></td>
</tr>
<tr>
<td>(4) Requests that service endpoint(s) be added to Services Registry</td>
<td>(6) Verifies certificate(s) meet requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Issues?</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(7) Adds test service endpoint(s) to Services Registry</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(8) Adds production service endpoints to Services Registry (&quot;suspended&quot;)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>(9-10) Sends email addresses for testing POCs with notice to proceed with testing</td>
<td>(11) Tests with other Participants</td>
<td>Tests with new Participant</td>
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<tr>
<td></td>
<td></td>
<td>(12) Completes testing report</td>
<td></td>
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Add Participant to Trust Profile (cont.)

<table>
<thead>
<tr>
<th>CIC</th>
<th>CTEN Administrator</th>
<th>New Participant</th>
<th>Existing Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>(13) Reviews testing report against requirements</td>
<td>(12) Completes testing report</td>
<td>(14) Requests that new Participant enter production</td>
<td></td>
</tr>
<tr>
<td>(14) Requests that new Participant enter production</td>
<td>Remove test endpoint(s)?</td>
<td>(15) Removes test service endpoint(s) from Services Registry</td>
<td></td>
</tr>
<tr>
<td>(15) Removes test service endpoint(s) from Services Registry</td>
<td>(16) Marks production service endpoint(s) “active” in Services Registry</td>
<td>(17) Sends notice that Services Registry was updated (via email)</td>
<td></td>
</tr>
<tr>
<td>(16) Marks production service endpoint(s) “active” in Services Registry</td>
<td></td>
<td>Updates service endpoint information</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Notes successful addition to Services Registry</td>
<td>Updates service endpoint information</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(17) Sends notice that Services Registry was updated (via email)</td>
<td></td>
<td></td>
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</tbody>
</table>

Notes successful addition to Services Registry

Updates service endpoint information

Updates service endpoint information
B. **Removing a Participant from a Trust Profile**

**Precondition:** The CIC has determined that a Participant of the CTEN should be removed from a Trust Profile, or a Participant of the CTEN has determined that it no longer wishes to participate in a Trust Profile.

**Post-condition:** The Participant has had appropriate entries removed from the Services Registry.

1. The CIC determines that a member of the CTEN no longer meets the policy and process requirements for a Trust Profile or, for some other reason, should have service endpoints removed from the Services Registry, or a member of the CTEN wishes to be removed.

   **Rationale:** The CIC has the sole authority to determine whether an organization should have entries removed from the Services Registry due to non-conformance with policies and processes required for a Trust Profile.

   **Noteworthy:** A Participant of the CTEN may no longer wish to participate in a Profile. While a Participant may simply disable its service endpoints to disable exchange, it is required to alert the CIC of such action, which should be communicated to other Participants of the CTEN.

2. The CIC or a representative of the Participant contacts the CTEN Administrator by email instructing the CTEN Administrator to remove service endpoint(s) from the Services Registry.

   **Rationale:** It is desirable for CAHIE to define a single point of contact – the CTEN Administrator – to manage the process for Services Registry administration.

3. The CTEN Administrator removes the service endpoints corresponding to the Trust Profile from the Services Registry.

4. The CTEN Administrator sends an email to the CIC and the administrative POCs of all Participants of the CTEN alerting them that the Services Registry has been updated. The CTEN Administrator contacts the CAHIE website administrator to remove the organization from the list of Participants of the Trust Profile.

   **Rationale:** CTEN policy calls for an organization to check the Services Registry regularly for updates to service endpoints and digital certificates. Email will be used to contact the
administrative POCs to ensure that all Participants of the CTEN update their trust stores and services registries promptly.

*Noteworthy:* The CIC is alerted simply so they may monitor updates to the Services Registry.

5. The administrative POCs of all members of the CTEN ensure that their trust stores and local services registries are updated.

*Rationale:* This update ensures that the local cache of service endpoints and digital certificates, should a Participant maintain one, is updated from the Services Registry to remove the old entries.

*Noteworthy:* The Services Registry allows for an organization to check for service endpoints regularly to ensure use of new or updated information. Participants of the CTEN may implement a manual process.

The following flow chart illustrates the procedure for removing an existing member of the CTEN from the Trust Profile. Numbers within individual steps in the flow chart reference numbered steps in the above procedure.
IV. References

None

V. Related Policies and Procedures

- CTEN Exchange Policy and Procedure documents EPP-1 Definitions and Maintain Exchange Policies and Procedures
- CTEN Exchange Policy and Procedure EPP-8 Policy for Treatment, Payment, and Operations

VI. Related Forms

- CTEN Testing Plan Form
- CTEN Testing Report

VII. Version History

<table>
<thead>
<tr>
<th>Date</th>
<th>Author</th>
<th>Comment</th>
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<td>1.0 9/15/2017</td>
<td>Rim Cothren</td>
<td>Initial release.</td>
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