



DELAWARE SINGLE SIGN ON (DE-SSO) INFORMATION & RECOMMENDATIONS

OVERVIEW

DE-SSO is designed to manage access to internal and public facing applications. DE-SSO has been configured to be very flexible in order to allow for the best on-boarding experience possible. The On-Boarding Process is designed to safeguard resources while providing for the availability of the application to authorized users. One of the frequently used and well known applications using DE-SSO is the State's "Employee Self-Service" application.

DE-SSO ON-BOARDING PROCESS

Welcome to the DE-SSO application On-Boarding Process! By reading this document, you are completing the first step of the process. After reading this document, please feel free to contact DTI_DE_SSO@state.de.us with any questions you may have.

The second step in the process is the submission of the "**DE-SSO Initial Questionnaire**". The questions are focused on functional requirements and your answers give the development team the information they need to begin to design an implementation strategy for your application.

During the time a strategy is being developed the team may ask for additional information or for a meeting to expand upon or clarify the information they have received. At this time there may be a need to involve the organization's technical resources. The organization technical resources could include state resources and/or vendor resources that support the application.

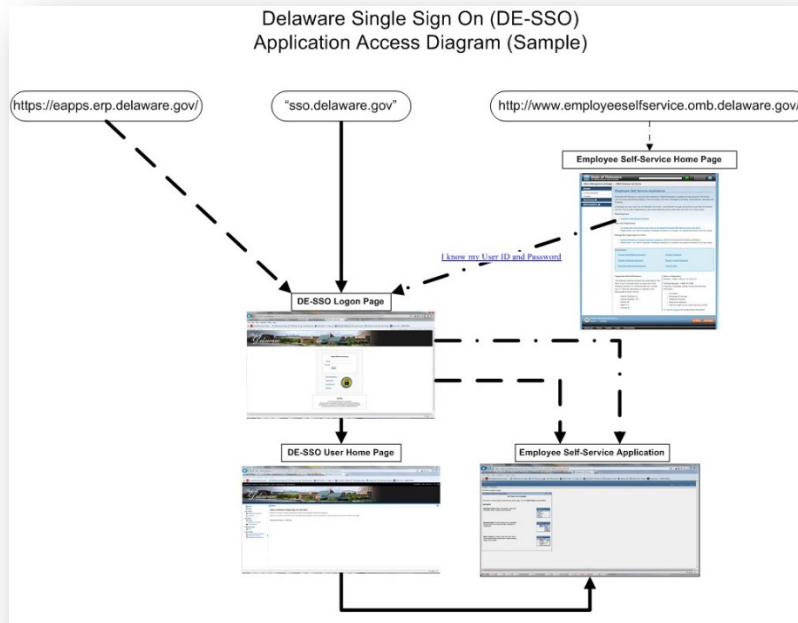
Once a strategy is drafted the development team will communicate the proposed strategy to the organization and then work with the organization to finalize the solution. Upon acceptance of the strategy by all parties the organization will need to complete the "**DE-SSO Configuration Questionnaire**". This questionnaire has questions the development team needs answered before they can construct the on-boarding. Organization functional staff may also be needed to complete some of the responses.

Once design is complete and all information has been collected the development team will work with the organization's functional and technical staff to establish and execute a development, test, and implementation time line.

APPLICATION ACCESS AND LOGOUT STRATEGY

Below is an example of how an application is accessed through DE-SSO. This example is using the State's Employee Self Service application.

- Onboarding the Employee Self Service application to DE-SSO involved pointing the then existing URL (<https://eapps.erp.delaware.gov/>) to the DE-SSO Logon Page (<https://sso.delaware.gov>) where user authentication occurs. Accordingly, the URL(s) for your application will also be made to point to the DE-SSO Logon Page for user authentication. The figure below illustrates this solution.



- DE-SSO recommends that your application have its own website/entry point with links to DE-SSO.
 - Continuing with the Employee Self Service example, the Office of Management and Budget (OMB) is using <http://www.employeeselfservice.omb.delaware.gov/> as an entry point for the state's Employee Self Service application. On this page the application administrators may post information for how one navigates DE-SSO and for communicating any application specific information unrelated to DE-SSO.
 - NOTES:
 - Most applications also use this page to provide application user help. When developing this page see the "**APPLICATION HELP STRATEGY**" section below and especially the "Considerations for Developing the Application Website" within that section.
 - The DE-SSO support team does not develop, implement, or maintain this page. Other examples organizations have established for website entry points include:

Division of Motor Vehicle Motor Carrier - <http://www.dmv.de.gov/services/MotorCarrier/>
Pensions Office ePay Self Service - <http://open.omb.delaware.gov/ePaySelfService.shtml>

Application exit options

- A “Link-Back” to DE-SSO should exist in the application being on-boarded. The “Link-Back” should return the user to the DE-SSO home page. To be consistent with what has already been implemented in other applications it is recommended that the link label “DE-SSO”. You can see this in the PHRST Self-Service application. NOTE: This “Link-Back” cannot be implemented in your application by the DE-SSO support team. If you decide to put this in your application it must be done by your application support group.
 - In QA the destination link is <https://ssoqa.dti.delaware.gov/>
 - In PD the destination link is <https://sso.delaware.gov/>
- Logout – Below is the recommended process to use when your user logs out of your application. The process to use is dependent on which connection is used to bring your application on-board. The connection used to bring your application on-board will be determined as part of the strategy/design phase.
 - For applications that use a Web Service connection - In order to facilitate a complete logout from SSO, your application needs to make a call to the SSO logout page. This is done by having your logout send the user to the URL <https://sso.delaware.gov/oam/server/logout>. You can pass a value for an end URL by appending “?end_url=yourtargeturl” to the URL.

For example: https://sso.delaware.gov/oam/server/logout?end_url=http://dti.delaware.gov/.
In this example, upon successful logout, the user would be sent to **<http://dti.delaware.gov>**
 - For applications that use a SAML connection – Your application will be made to open in a new tab of the user’s browser. When the user goes to logout the application should only concern itself with logging out of the application and not make any attempt to manage logging out of DE-SSO.

APPLICATION HELP STRATEGY

The DE-SSO technical support group does not provide any type of assistance for application “user” issues such as help with enrollment to the application, password resets, or any application specific problems et al.

In order to address issues of this nature the application should provide a link to a website that assists the user with the problem and/or a phone number to the application’s help desk for assistance. Should a user encounter a problem that cannot be resolved by the application’s website/help desk the help desk should create a DTI help ticket by contacting the DTI help desk at 302-739-9560 or emailing DTI_ServiceDesk@state.de.us

For the help website most applications have used the same page as was used for the application’s entry point noted in the “**APPLICATION ACCESS AND EXIT STRATEGY**” section. See “Considerations for Developing the Application Website” below for things to consider when developing this page.

The link when provided by the application’s support group will be included on the DE-SSO page <https://sso.delaware.gov/iamsso/contact.jsp>. A user can get to the page via the DE-SSO “Contact Us” or “Help” link on the page <https://sso.delaware.gov>.

An example of what is provided on the <https://sso.delaware.gov/iamsso/contact.jsp> page is shown below.

The following is the contact information for each DE-SSO application.

Active State of Delaware Employee Services	Public Services
<ul style="list-style-type: none">• Employee Self-Service User Account Assistance• Information Security Officer Assistance• Governor’s Agency Legislative Tracking Assistance• Technology Cost Management System Assistance	<ul style="list-style-type: none">• Pensions Self-Service User Account Assistance• Motor Carrier Contact Information

Examples: Agency provided links to “Help” specific to the application.

Considerations for Developing the Application Website

- The DE-SSO support team does not develop, implement, or maintain this page.
 - Password resets Employee Self-Service Help Desk will do state employee password resets.
 - Your application’s help desk will be responsible for resetting the non-state employee passwords.
- Lock outs
 - DE-SSO has an auto unlock feature built into the system so that, should a user lock them self out of DE-SSO, the system will automatically reset the user’s account after 15 minutes. The user will then be able to try logging in again with their password or exercise the “Forgot Password” function.
 - As with passwords the application’s help desk is responsible for unlocking any non-state employee accounts. Employee accounts will be unlocked by the Employee Self-Service help desk.

APPLICATION REQUIREMENTS TO WORK WITH DE-SSO

For the most current information the organization needs to be aware of in order to work with DE-SSO please visit the DE-SSO website <https://sso.delaware.gov/iamsso/contact.jsp>. This site will contain information like DE-SSO scheduled maintenance times and DE-SSO Internet Browser Compatibility among other things.

CERTIFICATE & METADATA

Unique links (shown below) are available to the DE-SSO Quality Assurance (QA) and Production (PD) environments that allow application developers to access the DE-SSO environment's certificate & metadata.

To be allowed access to the links, the organization developer must establish a user ID and password in the environment(s) they need the certificate & metadata for.

Once the ID has been established the organization approver must submit an email to DTI_DE_SSO@state.de.us requesting the developer's ID is granted the role to access the certificate & metadata. The email must contain the environment in which the ID was established (QA, or Production) and the developer's ID as they established it for the environment. Upon receipt the ID will be granted access to the requested data and the organization approver will be notified.

QA Link - <https://ssoqa.dti.delaware.gov/oamfed/idp/metadata>

PD Link - <https://sso.delaware.gov/oamfed/idp/metadata>

CONVERSION/LINKING APPLICATION ACCOUNTS WITH DE-SSO ACCOUNTS

DE-SSO creates a unique value for every DE-SSO user and stores that unique value in a field called "AppID". Generally speaking DE-SSO prefers the AppID is used as the unique identifier of the user in the target application. However, there are other fields held by DE-SSO that could be used for the same purpose.

Where an application has been in production, meaning it has registered/historical users, it will be necessary for the application to construct a solution on the application side to convert or cross-reference an existing user to the DE-SSO AppID. Following are notes to assist with the development of that solution:

- The application may receive any or all of the fields, shown to the right, in the HTTP header from DE-SSO. The application may use any of this information in its solution.

Note: Should one or more of these fields (other than AppID) be updated in DE-SSO you will receive the updated information the next time the DE-SSO header is sent to the application.

- If the application contains only State Employees and contractors, and the owners can provide a list of Employee IDs (emplids) that are mapped to the application UserIDs, DE-SSO can provide a conversion map of AppID to existing application UserIDs. DE-SSO will make special arrangements for the contractor IDs.

- If the application needs/stores any of the user's email address as it is saved in DE-SSO then the email address should be made one of the attributes received from DE-SSO. This is because should the user later update their email address in DE-SSO the new address will be passed to the application automatically for updating in the application.

AppID
UserID
eMail
First name
Middle Name
Last Name
Street
City
State
Zip code
PO Box
Country

THINGS THAT YOU WILL NEED TO PROVIDE

Below are some of the deliverables expected from the application side as part of the implementation. There will be other deliverables but they will be dependent upon the solution used for bringing your application on-board. Items below will be required regardless of how your application is installed.

- Website with link(s) to DE-SSO – See “**APPLICATION ACCESS AND LOGOUT STRATEGY**”
- Label to use to access the application’s help page – See “**APPLICATION HELP STRATEGY**”
- Define the unique data to be used for identifying the the application’s user to DE-SSO – See “**CONVERSION/LINKING APPLICATION ACCOUNTS WITH DE-SSO ACCOUNTS**”
- If applicable provide a conversion plan for existing users - See “**CONVERSION/LINKING APPLICATION ACCOUNTS WITH DE-SSO ACCOUNTS**”
- Two Image files files must be provided for the purpose of creating tiles that can be used to access your application through the DE-SSO home page. Particulars for the images are as follows:
 - One image should be without the white circle and one should be with the white circle as illustrated below. The image with the circle is for the hover functionality. Below are examples of the existing “My Information” tile.



- The dimension of each graphic should be:
 - 166 pixels Tall
 - 215 pixels Wide
- The color used inside the circle should be lighter than the color outside of the circle.
- Please review existing tiles in DE-SSO for examples.