

How to Use TargetSolutions' Application Programming Interface

Frequently Asked Questions

Can TargetSolutions Integrate with Another Program We Use?

What you're looking for is a way for the TargetSolutions system to talk back and forth with another system. Maybe you want to keep your users' profiles updated with information stored in another system, or a new user to be created when one is created in your HR system, or completion records to be sent over to another system. To make one system talk to another, you need an API, which TargetSolutions provides.

Most importantly, you need to make sure that whatever system you want to integrate with also has an API, or a way to interact with other systems programmatically.

What Is an API?

APIs are used to allow communication between separate systems. Imagine a web site. You are able to interact with web sites to create an account, download a file or whatever you are there to do.

What an API does is take the human part out. It allows computer programs to interact with the services available on that website without the front-end. A developer can code up a program that says "I want a new user created in website A, each time a user is created in website B." Now, you won't need to physically interact with website A to create users ever again.

What Are TargetSolutions' APIs Capable of Doing?

TargetSolutions has two types of APIs: TargetSolutions RESTful API and a Report API. RESTful API is capable of the following:

- Create a new user
- Inactivate a user
- Modify user profile information
- Add and remove users from groups
- Add, remove and edit groups
- Manage supervisor rights
- Manage user Credentials

Report APIs allow you to programmatically extract data contained in the following canned reports accessible in the Generate Reports application:

- Completions
- Incomplete Assignments
- Credentials

How Do I Use TargetSolutions' APIs?

You will need to find a technical resource within your organization/city/county with the ability to build a program to integrate TargetSolutions' platform with software you are currently using.

It's worth mentioning that TargetSolutions' API was written using a protocol called REST, which is very common in the programming world. This standard was chosen because many of TargetSolutions' clients do not have technology resources available and developing a program that uses a RESTful API is something that can be outsourced to professional software services groups.

Why Can't TargetSolutions Work Directly with the Software Company I'm Trying to Integrate with TargetSolutions?

APIs are basically a mechanism to translate data. For example, say TargetSolutions' system speaks German and Software X speaks French. A developer on your end would write a program that takes information from Software X that is in French, translates it and sends it to us in German. TargetSolutions and Software X are not able to write the program because they speak different languages. This would be a translation piece that is developed by technical people employed by your department.

What Level of Support Will TargetSolutions Provide My Developer?

TargetSolutions has a Developer Portal that contains technical documentation, developer FAQs, and a sandbox environment to test functions without effecting live data.

It is highly recommend that developers read the Getting Started page as a first step. The portal can be found online at <http://developers.targetsolutions.com>.

Also, TargetSolutions is able to answer questions about the capabilities of its API, but is not able to provide support in learning how to write to an API.

Here is some information about REST: http://en.wikipedia.org/wiki/Representational_state_transfer.

TargetSolutions' developers have found that Postman is a good tool for learning how to use APIs. You can find more information online at <http://getpostman.com/>.

How Much Does This Cost? Access to TargetSolutions' APIs is included with the cost of the platform.

TargetSolutions Single Sign-On (SSO) Integration

This article provides answers to frequently asked questions regarding Vector LMS, TargetSolutions Edition Single Sign-On (SSO).

Single Sign-On (SSO) allows users to get one-click secure access to multiple VectorSolutions products using a single username and password. SSO functionality offers the following benefits:

- Improves security and compliance by eliminating multiple passwords needed to access Vector LMS (TargetSolutionsedition), Vector Evaluations+, Vector Check It, and Vector Scheduling. Log in once and navigate between applications.
- Improves productivity by only needing to log-in once.
- Integrates with customer's identity provider (such as Active Directory, Azure AD and other compatible systems).

Implementation of Single-Sign-On can be done during the implementation of any of the products listed above or, after the implementation, as in the case of a Vector software product purchased later and the Administrator would like to transition multiple solutions to Single-Sign-On.

Requirements

Single-Sign-On provides support for SAML 2.x (Security Assertion Mark-Up Language) as the authentication method for users to log into one system and then automatically be logged into the other systems.

If your identity provider is SAML 2.x conformant, we can complete the integration. Most customers employ either Active Directory or Azure AD however, Vector is compatible with other identity providers as well. Contact VectorSolutions if you have another identity provider you use to determine compatibility.

Implementation

The VectorSolutions Implementation Team will partner with your organization to implement an integration with your identity provider.

VectorSolutions will provide:

- The Entity ID and Signature Verification information.
- The email address of the tech person that will be setting up SSO for you.
- Test login credentials for the identity provider software.

The customer will need to provide:

- The Identity Provider XML (metadata). It should include:
 - o Assertion Consumer Service URL (for testing and production).
 - o Required SAML2 token claim values.
 - o Customer login URL (for testing and production).

Timelines

Implementation of Single-Sign-On typically takes 90 days from start to finish assuming availability of the proper resources and information to complete and test the integration.



What is TargetSolutions Single Sign-On?

TargetSolutions Single Sign-On (SSO) allows TargetSolutions accounts users (if configured) to do one or both of the following:

1. Log in directly to TargetSolutions with a username and password. Then, select from a menu to click through to Evaluations+, Check It, or Scheduling without entering a username or password for each individual product. The organization and/or the individual user manages their TargetSolutions user profile which contains their username and password.
2. Log into their own organization's Windows environment (their local computer) with their organization's username and password and then navigate to their organization's menu of available applications to the user, and the user simply clicks through to the application and is automatically logged in without entering another username or password. This second option requires the organization to complete a technical integration with TargetSolutions. This is sometimes referred to as "SSO Integration" or "Single Sign-On Integration" or "SAML Integration."

What is the benefit of Single Sign-On?

Information security in today's world has become increasingly important and information security teams know that the fewer passwords their users need to do their jobs, the less security risk there is for their users and their organization as a whole.

A direct login to the TargetSolutions platform, which then allows access to Evaluations+, Check It, and/or Scheduling (dependent on what the customer is licensed for) eliminates having four separate usernames and passwords.

An SSO Integration with TargetSolutions eliminates the TargetSolutions direct login username and password and relies on the organization's own username and password by employing an identity manager that the organization uses across all of its software and applications.

How long will the project take from start to finish to complete?

Implementation of Single-Sign-On typically takes 90 days from start to finish assuming availability of the proper resources and information to complete and test the integration

Do you support ADFS (Active Directory Federation Services) for user authentication or LDAP for user authentication?

Yes. ADFS is a layer on top of active directory, essentially, it is the system that makes Active Directory work for single sign-on. LDAP is a way to pull user information from something like Active Directory. Both methods can work for single sign-on.

What happens if the customer deletes a user?

If you are using the API to update users, then the user will automatically be updated. If you are not using the API, this will be a manual process in which your Administrator will need to set those users to a different status or remove them.

Does the single sign-on work on mobile device?

If you are using the product(s) using a web-browser on a mobile device it works the same as through a browser on a desktop or laptop computer.

If we update users email addresses, for example from @city-illinois.gov to @city.com, how does that transfer into Single-Sign-On? Does it happen automatically, or is there manual effort required to update the usernames/email addresses on the back end?

Email is being used as the primary identifier for a user, so a new email address is considered a different user for Single Sign-on. If the email and username are updated prior to them logging in, it would recognize them as the same user.

Do we support "Just-In-Time provisioning"?

Yes.

Do we support Open ID 2.0?

Yes we do support Open ID 2.0; however, we do not support any other version of Open ID, including Open ID Connect.

I license TargetSolutions and Check It (or Evaluations+ or Scheduling) from Vector Solutions but my users are signing into each with separate usernames and passwords. Who can I speak with to understand how I can move my users to single-sign-on for all four products?

Contact your Customer Success Manager or our Customer Services team at Support.PublicSector@VectoSolutions.com or 1-800-840-8048.