What is SAML v2.0?
Security Assertion Mark-Up Language (SAML) is an authentication method for users to log in to one system automatically by being logged into another. The idea is to sign in once (usually to your school’s network directory service) and the tools you use will ‘authenticate’ you based on that single sign-on (SSO). FastBridge Learning® supports SAML v2.0 as an SSO method for our FAST™ application.

Implementation timeline:
Once the district provides all the information required, please allow up to four weeks for FastBridge to implement this SSO solution from beginning to customer testing and sign-off, to end.

Prerequisites:
1. Your district must have an active FAST account set up with FastBridge.
2. The district must verify that their SAML 2.0 federation services are compatible with Microsoft Active Directory-Federation Services (AD-FS).
3. Your AD-FS compatible environment must have Publicly Trusted Certificates enabled.
4. In the FAST application, the District Manager user must verify that the SSO Enable is set to On.
5. The district should have ready access to teacher ID’s, Student ID’s, nameID from your AD-FS POST responses, and a FastBridge roster in CSV format that will be edited by the school. You will want this handy when you are re-creating your rosters to fit the SSO implementation.

What does FastBridge provide?
1. A ‘District_Key’. A unique identifier with no spaces and no punctuation. For example, Best School NY becomes bestschoolny.
2. A token-signing certificate (SHA-256) via URL for the district to import.
3. At the end of this process, an SSO link with your ‘District_Key’ inserted. For example, https://auth.fastbridge.org/sso/[district_key]/metadata.do. This link will redirect to the district AD-FS page where staff sign in. Once completed, a POST response is sent with a token issued from the AD-FS server and contains a timestamp and a NameID that exactly matches the NameID in the newly-constructed roster (See “What districts must provide” on the next page).
What districts must provide FastBridge (in order):
1. School Site Metadata
   a. An XML document generally provided by district administrator from an AD-FS URL.
2. Verify the token-signing certificate is imported.
3. Any changes to your roster
   a. The UserID format used in-roster for SSO clients in FastBridge is:
      [district_key][roleID][nameID]
      In our case above, a teacher could be bestschoolny_8_1234567

Role IDs are:
- 6-District Manager
- 7-School Manager
- 8-Teacher
- 91-Specialist
- 92-Group Proctor
- 10-Student

Both student and staff rosters must be modified as follows:
**Student roster**
- StudentID has to be the nameID that we will get in the SAML POST response.
- TeacherID has to be the nameID that we will get in the SAML POST response.
- TeacherEmail has to be in the format of [district_key]_8_[nameID] where nameID has to be the nameID that we will get in the SAML POST response. It should NOT be an email address.
- This is 8 because the roleID for the teacher is 8. See below example, and note again that the teachers’ actual email address should not be on student rosters with SSO integration, that gets put in through the Staff Roster process.

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>StudentID</th>
<th>NameID</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>1018852</td>
<td>Andy</td>
<td>3136</td>
<td>James</td>
<td>Burgin</td>
</tr>
<tr>
<td>1019698</td>
<td>Joe</td>
<td>3136</td>
<td>James</td>
<td>Burgin</td>
</tr>
<tr>
<td>1019709</td>
<td>Bessy</td>
<td>3136</td>
<td>James</td>
<td>Burgin</td>
</tr>
<tr>
<td>1019712</td>
<td>Gene</td>
<td>3136</td>
<td>James</td>
<td>Burgin</td>
</tr>
<tr>
<td>1007763</td>
<td>Grover</td>
<td>161951</td>
<td>Dave</td>
<td>Cierski</td>
</tr>
<tr>
<td>1010351</td>
<td>Dan</td>
<td>161951</td>
<td>Dave</td>
<td>Cierski</td>
</tr>
<tr>
<td>1010367</td>
<td>Shae</td>
<td>161951</td>
<td>Dave</td>
<td>Cierski</td>
</tr>
</tbody>
</table>

**Note:** The above screen shot is an extract of the complete roster.
Staff roster

- UserID has to be of the format `{district_key}_{roleID}_{nameID}` where roleID is the value in column2, and nameID has to be the nameID that we will get in the SAML POST response.
- Email should be their actual email address.
- Since we request the teacherEmail in the roster to not be their actual email, the actual email addresses of the teachers can be updated using the staff roster. Please include teachers in the following format:
  - UserID has to be the same as the teacherEmail in the student roster.
  - Email should be their actual email address.

No new teachers will be added with this process. Only emails for existing teacher uploaded through the student roster will be updated.

<table>
<thead>
<tr>
<th>SchoolName(s)</th>
<th>RoleID</th>
<th>UserID</th>
<th>FirstName</th>
<th>LastName</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lincoln High Schoo</td>
<td>7</td>
<td>anycounty_7_betty_white</td>
<td>Betty</td>
<td>White</td>
<td><a href="mailto:betty_white@sample.com">betty_white@sample.com</a></td>
</tr>
<tr>
<td>Abraham Elements</td>
<td>7</td>
<td>anycounty_91_tom.cruise</td>
<td>Tom</td>
<td>Cruise</td>
<td><a href="mailto:tom.cruise@sample.com">tom.cruise@sample.com</a></td>
</tr>
<tr>
<td>Scott Middle Schoc</td>
<td>91</td>
<td>anycounty_91_timsmith</td>
<td>Tim</td>
<td>Smith</td>
<td><a href="mailto:timsmith@sample.com">timsmith@sample.com</a></td>
</tr>
<tr>
<td>Lincoln High Schoo</td>
<td>91</td>
<td>anycounty_7_johnadams</td>
<td>John</td>
<td>Adams</td>
<td><a href="mailto:johnadams@sample.com">johnadams@sample.com</a></td>
</tr>
</tbody>
</table>

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