

# Scope of Support

Last Modified on 08/06/2025 4:17 pm CD7

←Go Back

# **Overview**

To ensure transparency and set clear expectations, the Campus Support Team is available to assist with product-related questions and issues, offering troubleshooting and guidance based on the tools and products developed by Infinite Campus.

Certain areas fall outside the scope of our support services. These include, but are not limited to:

- **Customized versions of Campus products** Support does not build or modify custom features, scripts, or integrations that fall outside the standard functionality of our products.
- **Policy interpretation or recommendations** Support does not interpret, advise on, or make recommendations regarding district, state, or organizational policies.
- **Third-party applications and integrations** Support for external tools—including browser configurations, printers, Adobe, Java, and other third-party plug-ins—is not included.
- Professional services Support does not include training, process consulting, data services, or other specialized technical assistance. For additional services or custom work, we may refer you to our professional services team or a trusted partner.

#### **Supported Version & Platform**

Support is accessible for all versions of Infinite Campus. Customers should adhere to the minimum operating platform requirements and recommendations for use with the Infinite Campus software. See <u>Supported Platforms</u>.

# **Referral to State Department of Education**

Campus Support will refer a District/PSU to the appropriate State Department when:

- A policy decision or interpretation is needed that falls outside Infinite Campus's authority.
- The inquiry pertains to data standards/data entry required by the State Department.
- The issue involves data managed within the state edition (e.g., state-published Ad Hoc reports or state course code data).
- A new state reporting requirement is requested without a clearly defined source of truth.
- A potential issue has been identified in a localized state report; however, it currently lacks sufficient documentation to confirm and validate it as a bug.
- The issue involves third-party vendors.

For needs beyond our standard support, we may refer you to our Professional Services Team or a trusted partner. Details on these services are provided below.

# **Additional Campus Teams**

In addition to the Campus Support Team, several specialized teams offer professional services to help districts maximize the value of Infinite Campus products:



#### • Technical Services

Assists with data modifications, imports/exports, and custom reports tailored to meet your district's specific needs.

#### • Campus Training

Provides comprehensive training to empower your staff to use Infinite Campus tools effectively and confidently.

#### Business Consulting

Enhance your use of Campus, streamline processes, reduce redundant data entry, and save staff time. Business Consulting guides you in evaluating current practices and implementing improved or new workflows.

#### • **Channel Partners**

Infinite Campus partners with trusted local organizations to deliver products, professional services, and support. Channel Partners operate as regional extensions of Infinite Campus, with dedicated teams for customer acquisition and support.

If one of these teams performs work for your district, they will also provide support for that work. For questions about these services, your district's Authorized Contact should reach out to your designated support team.

# **User Accounts**

## Password resets

District account management is the responsibility of the district. For security reasons, Campus Support does not manage user account credentials or perform password resets.

Password reset requests should be handled via the Password Reset functionality or directed to an admin or Authorized Contact at your district. If a district admin or Authorized Contact needs a password reset, the admin should use the Password Reset functionality or involve another admin or Authorized Contact within the district. Running the <u>Product Security Role Report</u> for the Student Information System role will clarify who at the district has the ability to perform password resets.

# User account management when using SSO or LDAP

Note that some governing agencies, such as the North Carolina Department of Public Instruction, do not allow use of Local Campus Authentication. Ensure you comply with your governing agency's security practices.

## Single Sign-On (SSO) accounts

Admins and Authorized Contacts are expected to have a contingency plan for site access in the event your Identity Provider has an issue that makes it impossible to sign in through SSO. Admins should consider setting up a second user account under their own person record that uses an authentication type other than SSO (such as LDAP or Local Campus Authentication). We recommend securing this account with <a href="mailto:Time-Based Multi-Factor Authentication">Time-Based Multi-Factor Authentication</a>.



If a username is set to an Authentication Type of SAML (SSO), the User Account screen will show "Password Reset Unavailable". This is because the password for that account is managed within your Identity Provider system, not within Infinite Campus.

#### **LDAP** accounts

Admins and Authorized Contacts are expected to have a contingency plan in place for site access in the event your district's LDAP server has an issue that makes it impossible to sign in through LDAP. Admins should consider setting up a second user account under their own person record that uses an authentication type other than LDAP (such as SAML i.e. SSO, or Local Campus Authentication). We recommend securing this account with <a href="mailto:Time-Based Multi-Factor">Time-Based Multi-Factor</a> Authentication.

If a username is set to an Authentication Type of LDAP, the User Account screen will show "Password Reset Unavailable". This is because the password for that account is managed within your Identity Provider system, not within Infinite Campus.

# Access to Non-Production Sites (Sandbox, Staging, Training)

#### **Local accounts in Non-Production Sites**

After a refresh, credentials will by default match what they were in production at the time of that refresh. If it has been a while since the last refresh, consider having your Authorized Support Contact refresh the non-production environment, ensuring up-to-date credentials.

If an admin or Authorized Contact is unable to access the Sandbox, direct the request to another admin or Authorized Contact at the district. Running the <u>Product Security Role Report</u> for the Student Information System role will clarify who at the district has the ability to perform password resets.

#### **SSO Accounts in Non-Production Sites**

This section applies only when your district's Identity Provider uses a different IDP certificate in its production SSO app than in its non-production SSO app and/or requires an SP certificate.

This section does not apply to North Carolina users.

After a refresh, an admin needs to log into the non-production environment with their non-SSO account (i.e., LDAP account or local account) and <u>complete a step</u> in order to reinstate access to other SSO users in that environment.

If no admins have created a non-SSO account for themselves to be able to complete this step, an admin should create a non-SSO account (an LDAP account or local account) for themselves in Production, have the Authorized Technical Contact refresh the non-production environment again, then use that non-SSO account to access the environment and complete that step. We recommend securing this account with Time-Based Multi-Factor Authentication.



# **Ad Hoc Reporting**

## **Ad Hoc Filters**

(Query Wizard, Data Viewer)

The Ad Hoc Reporting tools are a way to select certain fields located throughout the product and place them in one central report. The result can be used as a report or as a filter that's used by other tools in the product to determine or limit what people or classes that tool affects.

#### **Options Available for Ad Hoc Filters**

# Campus Support

Campus Support does not offer Ad Hoc creation, training, or consultation.

#### Campus Support can:

• Ensure the Ad Hoc tools are behaving as designed. Confirm whether a specific field is available in Ad Hoc tools and where it is located. Evaluate what you are trying to achieve is within the scope of what Ad Hoc tools provide, and identify when results would be better achieved through another means (e.g. custom SQL query or custom report).

#### **District**

#### District can:

Utilize Knowledge Base articles and video resources.

Ad Hoc Reporting
Student Filter Fields
Staff Filter Fields

**Course-Section Filter Fields** 

- Make sure you are not reinventing the wheel. What you are looking for may already be available as a built-in report: <u>Available Reports</u>
- Take advantage of on-demand training content if your district is a <u>Campus Passport</u> subscribers.

Ad-hoc Course (requires Campus Passport subscription)

## Campus Technical Services

#### Campus Technical Services can:

Work with your district to design original extracts, reports, or imports
when what you are working on goes beyond what is possible through Ad
Hoc tools. If you would like a service quote, please have your district's
Authorized Contact provide requirements through a case for Technical
Services. Lead time is required.

Services provided by the Campus Technical Services team are supported by Technical Services pursuant to the established maintenance plan.



| Campus   | Campus Training can:   |
|----------|--|
| Training | Offer Ad Hoc training to your district. Districts with a Campus Passport |
|          | subscription can attend free of charge, and an on-demand Ad-hoc          |
|          | Course is also available to Campus Passport subscribers.                 |
|          |  |

# **Pass-Through SQL Queries**

The <u>Pass-Through SQL Query</u> option within the Ad Hoc Filter Designer tool is a way to create a filter that returns a list of specific people or classes that meet more complex logic conditions using the SQL scripting language.

The Pass-Through SQL Query tool is a self-service filter-building tool for users with an understanding of SQL scripting and knowledge of the <u>Campus data schema</u>. Campus Support does not offer SQL consultations. (See <u>SQL Scripting</u> for options on SQL training and custom report creation.)

<u>Sample Pass-Through SQL Queries</u> created by Campus are maintained by Campus (Technical Services).

## Ad Hoc Filter Performance and Timeouts

Infinite Campus recommends all reporting and scripting be designed for the smallest scope and increased in range from there. Be aware that complex ad hoc filters may return a successful result, but can also create unnecessary overhead on the SQL instance and temporarily impact site performance.

Ad Hoc filters have a timeout to safeguard against a filter that pulls too much data causing sitewide performance issues. Ad hoc filters that pull a lot of data may complete just under the allotted timeout limit initially and then hit the timeout cutoff later as the number of records in the district grows over time or the system load fluctuates.

**Options Available for Ad Hoc Filter Performance Issues and Timeouts** 



#### **District**

#### Short-term remediations:

#### District can:

- For Query Wizard filters, try running the query with the "Force Order" checkbox marked (Filter Designer > Select filter > Edit > mark the Force Order checkbox).
- Use filters to pull only the records you really need. Eliminate any extraneous fields.
- Break the filter out into multiple filters with a smaller scope (pulling data school-by-school, for instance).
- Consider running the ad hoc filter via the <u>Data Validation Report</u> tool.
   That runs ad hoc queries in the batch queue, allowing for background processing and better performance on large datasets. When building a heavy report intended for broader use, it's generally best to use the Data Validation Report tool.

#### Long-term:

Although Ad Hoc Query Wizard is a handy entry-level query-building tool, long-term, ad hoc filters are not the most efficient option when pulling a lot of data. Ad hoc filters pull from database views; this has ease-of-use benefits but does not perform as well as pulling directly from database tables with full control over how the data is joined together. It requires an advanced skillset, but the best long-term solution is to rewrite the ad hoc filter as a SQL query. Pulling the same data as a custom SQL query can give better performance. Also, the same timeout restrictions do not apply to SQL queries. If your district employs a database administrator skilled in SQL scripting and knowledgeable in the Campus schema, that is the ideal skillset.

## Campus Support

#### Campus Support can:

- When an ad hoc generates an error token, confirm whether it is due to the ad hoc taking more time than timing out vs. some other issue.
- When an ad hoc requires more than 10 minutes to generate and times out, test an equivalent query in a test site to rule out a code-level performance issue that is not data-dependent.

# Campus Technical Services

#### Campus Technical Services can:

 Work with your district to design an equivalent original SQL extract or report that is more efficient as a billable service. If you would like a service quote, please have your district's Authorized Contact provide requirements through a case for Technical Services. Lead time is required.

Services provided by the Campus Technical Services team are supported by Technical Services pursuant to the established maintenance plan.



# **Campus Training**

Campus Training can:

Offer the <u>Infinite Campus Schema Bootcamp</u> training. This is available
for any district staff with general SQL scripting skills who would benefit
from more knowledge of the Infinite Campus database schema
specifically. This training is free of charge for districts with a <u>Campus</u>
<u>Passport</u> subscription.

# Ad Hoc Filter Designer vs. Data Validation Report

There is some overlap between the capabilities of Ad Hoc Filter Designer and the Data Validation Report tool. Here's guidance on when to use which:

The <u>Ad Hoc Filter Designer</u> tool is great for quick, flexible data queries. It's ideal for interactive use or exploring data on the fly. However, because it runs in real time, large or complex queries can cause timeouts, making it less ideal for heavy or widely-used reports.

The <u>Data Validation Report</u> tool addresses this by running Ad Hoc queries in the <u>batch queue</u>, allowing for background processing and better performance on large datasets. Like Ad Hoc, validation reports can be **shared with user groups**, but they're better suited for recurring reports or those accessed by many users. When building a report intended for broader use, it's generally best to use the validation tool.

# **SQL Scripting**

(Data Extract Utility, Task Scheduler, Pass-Through Query Editor within Ad Hoc Reporting, SSRS Reporting, Events and Actions)

Structured Query Language (SQL) is a scripting language for accessing and manipulating data in a database, like the one that underlies your Infinite Campus site. Some Campus tools can be powered by SQL queries. SQL scripting is an advanced skill set. The level of assistance from Infinite Campus depends on who authored the SQL script.

SQL scripts, including extracts and stored procedures, are supported by the individual who wrote them. Coordinate with that individual for assistance. For example, a script from another vendor, another district, a forum post, etc.

#### **Options Available for SQL Scripting**

| Campus  | SQL consultation is <b>not</b> a service offered by Campus Support. Campus    |
|---------|---|
| Support | Support does not rewrite existing queries or advise on SQL written by others. |



# **District** District can: • Coordinate with the individual who originally authored the SQL query to support and troubleshoot that SQL query. • Staff users skilled in SQL scripting to ensure SQL queries written are properly optimized and perform well. For intensive gueries, consider guerying database tables directly as much as possible. Query writers unfamiliar with the Campus schema often overuse database views. Although convenient, unnecessary use of database views can introduce additional logic, add unnecessary reads, and greatly hinder performance. Campus Campus Technical Services can: **Technical** Work with your district to design original extracts, reports, or imports. If **Services** you would like a service quote, please have your district's Authorized Contact provide requirements through a case for Technical Services. Lead time is required. Services provided by Technical Services are supported by Technical Services pursuant to the established maintenance plan when Technical Services has worked with your district to develop any of the following: • SOL Stored Procedures Custom extracts Custom imports Custom reports **Campus** Campus Training can: **Training** • Offer Infinite Campus Schema Bootcamp training. This is available for district staff with general SQL scripting skills who would benefit from more Infinite Campus database schema knowledge. This training is free of charge for districts with a <u>Campus Passport</u> subscription.

# **Query Optimization**

Poorly optimized queries can cause performance issues. If a SQL script not created by Campus is causing a performance or tempDB issue, notify the individual who authored the SQL script so they can optimize their query.

A common cause of performance issues is when the query was written to pull from database views rather than directly from the relevant database tables; database views are useful and convenient, but pulling from database tables directly gives better performance. Also, see the <u>SQL Performance</u> <u>Tips</u> section of the Campus schema.

Query optimization is a highly technical skill set. Infinite Campus does not rewrite or advise on queries written by others. However, the Technical Services team may be able to work with your district to design original extracts or reports that are more efficient. To receive a service quote, please have your district's Authorized Contact provide requirements through a <u>case</u> for Technical



Services. Lead time is required. Services provided by Technical Services are supported by Technical Services pursuant to the established maintenance plan. The <u>Infinite Campus Schema Bootcamp</u> training is also an option.

# **Third-Party SQL Resources**

Consultations on the fundamentals of SQL and intricacies of query optimization strategies are not services offered by Infinite Campus. Fortunately, many resources are readily available, both free and paid. For your convenience, we have compiled a few examples.

Infinite Campus does not endorse or promote any specific resource from this list. Before proceeding, we encourage you to thoroughly review the content offered to ensure it meets your needs.

As you review resources, be aware that there are a few dialects of SQL. They are all similar in the basics, but for content focusing on a specific dialect of SQL, be aware that Infinite Campus uses Microsoft SQL Server and **T-SQL** (not MySQL, PostgreSQL, etc.).

If you are familiar with a resource that should be listed here but is not, please let us know via the Comments button at the bottom of this page.

| General Resources   | Additional Information                              |
|---|---|
| LearnSQL.com's Ultimate List of Resources   | Books, courses, video tutorials, practice resources |
| <u>Learning Tree SQL Courses</u>  | Instructor-led, fee-based                           |
| Microsoft's Querying Data with Microsoft Transact-<br>SQL Training                                      | Paid as instructor-led, free as self-<br>directed   |
| Stanford's edX Relational Databases and SQL Course  | Online, self-paced, audit-for-free                  |
| Pluralsight's Querying Data with T-SQL from SQL<br>Server Trainings                                     | Online, fee-based                                   |
| Mode.com's interactive SQL tutorial   | Free  |
| SQLBolt's interactive SQL tutorial  | Free  |
| Wise Owl's SQL video tutorials  | Free  |
| Query Optimization Focused  | Additional Information                              |
| <u>Think Like a SQL Server Engine video</u> - From Brent Ozar, Microsoft Certified Master of SQL Server | Free  |



| Fundamentals of Query Tuning training- From Brent Ozar, Microsoft Certified Master of SQL Server | Fee-based |  |
|--|-----------|--|
| <u>Use the Index, Luke</u> - Online version of <i>Performance Explained</i> by Markus Winand     | Free      |  |
| T-SQL Querying - Textbook from Microsoft   |           |  |
| SQL-Focused Communities  |           |  |
| <u>r/LearnSQL</u>  |           |  |
| Stack Overflow's SQL questions section   |           |  |
| Stack Overflow's SQL questions section   |           |  |
| Stack Overflow's SQL questions section  SQL Server Community Slack's #SQLhelp channel            |           |  |

# **Custom Reports**

Custom reports are supported by the individual or group who created them. If your district has custom reports that were created by an individual or group at your district or some other third party group, that individual or group supports those reports.

# **SQL Server Reporting Services (SSRS)**

Custom reports typically utilize SQL Server Reporting Services (SSRS) to display within Campus. SSRS is a Microsoft product requiring its own skillset.

Infinite Campus does not offer SSRS consultations or trainings, but Technical Services does offer relevant services.

#### **Options Available for Custom Reports**

| Campus<br>Support | Campus Support does <u>not</u> offer SSRS consulting.   |
|-------------------|---|
| District          | <ul> <li>District can coordinate with the individual who created the custom report or staff users skilled in SSRS reporting, who should:</li> <li>Support the user interface, logic, and SQL of the custom reports they created.</li> <li>Ensure report configuration is correct.</li> <li>Support additional SSRS-specific functionality the district has enabled that occurs outside of Campus, such as email subscriptions to SSRS reports.</li> </ul> |



| Campus<br>Managed<br>Services   | For Campus-hosted districts that use a Campus-hosted reporting server, Campus Managed Services can:  • Investigate reporting server outages.  • Ensure data source and reporting server credentials are valid.  • Confirm the connection string is valid (rsErrorOpeningConnection).   |
|---------------------------------|--|
| Campus<br>Technical<br>Services | <ul> <li>Campus Technical Services can:</li> <li>Work with your district to design original reports, extracts, or imports. If you would like a service quote, please have your district's Authorized Contact provide requirements through a case for Technical Services. Lead time is required.</li> <li>The Technical Services team supports custom reports created by Infinite Campus pursuant to the maintenance plan established when the report was created.</li> </ul> |
| Microsoft                       | SSRS is a Microsoft product. Microsoft provides the following resources for SSRS:  • General documentation • Troubleshooting documentation  Microsoft's recommendations for additional support are outlined in the Microsoft Q&A and Stack Overflow.   |

# Pass User Session: Encrypt URL-encoded Username, etc. Functionality

(Custom Tool Setup's URL Link and URL Editor)

This functionality refers to an option within the Custom Tool Setup tool when setting up an external link (a URL Link or a URL Editor). Selecting the "Encrypt URL-encoded username, etc." option from the "Pass User Session" dropdown ensures that specific additional information is appended to that URL as URL parameters when a user clicks your external link, and that those parameters are encrypted.

Implementing this functionality requires a technical skillset including SSRS report design and custom scripting, typically using Visual Basic. Infinite Campus is responsible for properly encrypting the parameters. If your district choses to implement this functionality, your district is entirely responsible for the coding of your page or report to correctly decrypt the parameters.

This functionality's main use in the past was to send report parameters into an SSRS report via URL parameters. These days that is considered a legacy method of passing parameters into an SSRS report.

Nowadays, the <u>SSRS Dynamic Report Options</u> tools are the recommended method of making SSRS reports available to Infinite Campus users. In other words, set up a connection to the



report server with the <u>SSRS Server Configuration</u> tool and map the reports into the outline with the <u>SSRS Report Configuration</u> tool rather than setting them up within the Custom Tool Setup tool; this method supports <u>automatically passing certain values</u> from Infinite Campus into an SSRS report.

## **Options Available for Encrypted URL Parameters**

#### **District**

For initial implementation, your district can:

- Consider using the <u>SSRS Dynamic Report Options</u> tools instead when the goal is to make an SSRS report available to Campus users. Otherwise:
- See Microsoft's general documentation on adding custom Visual Basic code to a Report Builder (SSRS) report: <a href="https://learn.microsoft.com/en-us/sql/reporting-services/report-design/add-code-to-a-report-ssrs">https://learn.microsoft.com/en-us/sql/reporting-services/report-design/add-code-to-a-report-ssrs</a>
- For specific scripting guidance, consider performing a web search for methods of decrypting URL query string parameters in Visual Basic.
- Microsoft's general recommendations for additional support are:
  - Microsoft Q&A
  - Stack Overflow

For existing custom webpages and reports, your district can:

 Coordinate with the individual in your district responsible for the custom report or webpage in question to ensure the SSRS report or webpage has been coded to decrypt the encrypted parameters properly.

## Campus Support

Campus Support can:

- Verify the URL parameters are present and encrypting properly.
- Provide an example (Java) implementation upon request.

Campus Support does not offer webpage scripting or SSRS report design services.

# **Third Parties**



Third-party application integrations or plug-ins are not supported. Exceptions are specific to vendors with whom we have an established partnership (<u>Digital Learning Partners</u> and <u>Business Partners</u>).

#### **Third-Party Contractors**

Due to FERPA regulations, Campus Support does not work directly with your third-party contractors. Your district's Authorized Contact should coordinate with the third-party contractor to share relevant details through a support case. If a call is needed, a member of the district who is an Authorized Contact must be present on the call.



### **Third-Party Software**

Third-party software is supported by that company. For example, questions about Adobe Acrobat (PDF and FDF files), Excel, etc., are best directed to those companies' respective support teams or your local district experts.

# **Browser Extensions and Plug-ins**

Third-party browser extensions are supported by the company or individual who developed that extension. If a browser extension adversely affects your Campus experience, we recommend notifying the developer of the extension so they can address the issue. Refer to the page you installed the extension from or the developer's website for support contact info.

#### **Third-Party Hardware**

(Attendance Scanning within Campus Workflow Suite, Campus Payments, Food Service/POS/Point of Sale)

Some Campus tools integrate with third-party hardware. Examples include point-of-sale terminals, receipt printers, barcode scanners, and RFID scanners. Campus supports hardware purchased through Infinite Campus pursuant to the purchasing agreement and product warranty. Issues and malfunctions with hardware purchased elsewhere should be brought to the attention of the company that produces it.

#### Third Party Vendors

Campus Support working directly with third party vendors is outside the scope of support.

#### **Business Partners**

Infinite Campus has established working relationships with <u>Business Partners</u> to power different aspects of Campus tools. Campus Support coordinates with business partners to escalate issues as needed.

# **Digital Learning Partners**

Infinite Campus has established working relationships with <u>Digital Learning Partners</u> to integrate systems, typically through <u>1EdTech</u> specifications.

Our Digital Learning Partners' development teams have direct access to Campus Development through their Digital Learning Partner Support Portal. The Digital Learning Partner's team can utilize their Digital Learning Partner Support Portal to communicate with the Campus Development team if the Digital Learning Partner's team believes an issue exists on the Campus end and misconfiguration has been ruled out.

Digital Learning Partner integrations include OneRoster-powered integrations and LTI-powered integrations.

# **OneRoster-Powered Integrations**



#### (OneRoster API)

OneRoster integrations are a way to send roster data out of Infinite Campus and/or send assignments/scores and/or assessments into Infinite Campus, depending on the vendor.

The nature of a OneRoster sync is that much of the process occurs outside of Campus, within your Digital Learning Partner system. The Digital Learning Partner system is in charge of making the sync requests, and your Campus site responds to the requests.

## **Options Available for OneRoster-Powered Integrations**

| District          | District can:   |
|-------------------|---|
|                   | <ul> <li>Refer to the <u>OneRoster Setup Guide</u> to ensure the correct setup processes are followed.</li> <li>Consult the <u>OneRoster Preparedness Checklist</u> to troubleshoot rostering issues.</li> <li>Use the <u>OneRoster 1.1 Data Models</u> to understand what data is available through the OneRoster API.</li> </ul>  |
|                   | <ul> <li>To troubleshoot a record (user, class, etc.) not present in your vendor's system that should be, use the built-in tools like the <u>OneRoster API Documentation</u> (especially <u>Accessing Specific Data</u>) to confirm Campus is making that record available to their system.</li> <li>Contact your vendor's support team with any questions or issues specific to their system.</li> </ul>                                       |
| Campus<br>Support | <ul> <li>Campus Support can:</li> <li>Look for misconfiguration in the Campus user interface.</li> <li>Confirm compliance with the OneRoster specification, as set forth by the consortium 1EdTech.</li> <li>Confirm the records in question are being made available to the Digital Learning Partner system.</li> <li>In some cases, Campus Support can confirm whether the Digital Learning Partner system has made sync requests.</li> </ul> |



## Third-Party Vendor

Your vendor's support team can:

- Support the phases of the integration that occur after Campus has successfully released data to the vendor's system.
- Support the integration phases before their system issues a sync request to your Campus site.
- Clarify what version of the OneRoster specification and OAuth security their system supports.
- Confirm when and how often the Digital Learning Partner system syncs, and whether the sync is configured to trigger automatically or manually.
- Support setup that occurs within their own system after data has been pulled in from Campus.
- Support their system's tools, like mapping tools.
- Address questions about their system's logic, like which assignment flag status their system supports syncing, and how their system uses the fields and records your Campus site makes available through the API data.
- Address their system's error messages.

# Non-Digital-Learning-Partner Vendor

OneRoster connections to vendors that are not

**Digital Learning Partners** 

can be set up but are offered as-is. As Campus has not vetted their Integration, the Campus Support team does not support issues.

Are you working with a OneRoster vendor who is not a Digital Learning Partner? Please share **this form** with your vendor so they can contact Campus and learn more about our Digital Learning Partner Program.

# **LTI-Powered Integrations**

(LTI)

LTI integrations can take a few forms. They can allow Infinite Campus users to do a secure launch (login) from Infinite Campus into the third party vendor's system, and/or allow embedding content from the third party vendor system to the Infinite Campus grade book to show on the Campus Student/Parent portal, and/or send scores from the third party vendor system into the Infinite Campus grade book.

#### **Options Available for LTI-Powered Integrations**



| District          | <ul> <li>For LTI systems that validate based on email addresses, Ensure students' and teachers' Email fields in Campus match their email addresses in the LTI system.</li> <li>For LTI systems that support score passback:         <ul> <li>Confirm that students are launching into the LTI system from Campus (from the linked assignment on the Campus Student Portal) and are not accessing the LTI system directly.</li> <li>Confirm that teachers are launching into the LTI system from Campus (from the Assignment Editor &gt; Learning Tools area) when scoring or editing the assignment and are not accessing the LTI system directly.</li> <li>In Campus, confirm the assignment's Scoring Type is set to Points and that Total Points correctly correspond to the assessment's total points in the LTI system before score passback occurs.</li> </ul> </li> </ul> |
|-------------------|--|
| Campus<br>Support | <ul> <li>Campus Support can:</li> <li>Confirm compliance with the LTI specification, as set forth by the consortium 1EdTech.</li> <li>Verify an LTI launch attempt from the LTI system occurred when a specific example student/teacher/class/assignment was provided.</li> </ul>  |
| Vendor            | <ul> <li>Your vendor's support team can:</li> <li>Ensure connection credentials to their system are valid.</li> <li>Support integration phases that occur before their system successfully releases data to your Campus site.</li> <li>Support their system's own configuration, logic, tools, and error messages.</li> </ul>  |

# **Campus Services that Integrate with Third Parties**

## Ed-Fi

(Getting Started With Ed-Fi)

Ed-Fi is a data interchange standard and framework created by the Dell Foundation to allow K-12 educational institutions to consolidate and analyze data, and communicate this data with each other.

## **Options Available for Ed-Fi Integrations**



# **District** District can: • Review state documentation explaining their system's validations when available when encountering validation errors in a state system. Ensure the ODS is configured properly to accept the data. Ensure data is entered into Campus properly according to Campus and state documentation. Utilize the available Ed-Fi Tools. Review Ed-Fi Event Queue Statistics to confirm recent sync activity. Coordinate with the person who manages the ODS to ensure the security certificate gets uploaded to Campus. **ODS System** The person who manages the ODS system, whether this is a state **Administrator** entity or someone in your district, can: • Clarify their system's validation errors, especially 500-level server errors. • Support the phases of the process that occur after Campus has successfully released data to the ODS. Maintain the ODS system's security certificate. Please refer to the Additional Ed-Fi Information section of the core **Campus Support** Ed-Fi article. Click to expand and review Support for Ed-Fi for detailed support expectations and helpful information to include when submitting a support case. In summary, Campus Support can: • Check for misconfiguration within the Campus user interface. • Review and investigate Campus error messages. (Be sure to review the state's documentation on their systems' validations for an explanation of validation errors coming from a state system. Purge the event queue as needed. The Campus Support team does not access the Ed-Fi database and does not assist with ODS configuration.

# **Email Relay Services**

#### (Messenger)

Messenger can send emails out of your Infinite Campus site by utilizing your chosen third-party email relay service. Mailgun is Infinite Campus's chosen partner for email relay services for Cloud and Cloud Choice Customers. If your district uses a third-party email relay other than Mailgun, your district is responsible for supporting and troubleshooting the aspects of email delivery that occur



after Infinite Campus has passed the email along to your third-party email relay service.

## **Options Available for Email Delivery Troubleshooting**

| District uses Mailgun as its email relay service (Mailgun is Infinite Campus' partner for email relay for Cloud and Cloud Choice Customers.) |  |  |
|--|--|--|
| District   | <ul> <li>District can:</li> <li>Review the Mailgun Message Log, which displays email recipient statuses, including failure errors.</li> <li>Conduct a web search on these errors to yield more information, since many errors come directly from the email recipient's service provider.</li> </ul>  |  |
| Campus<br>Support  | Campus Support can:  • Coordinate with Mailgun to support email relay issues.  |  |
| District uses a different third-party email relay service  |  |  |
| District   | <ul> <li>District should:</li> <li>Coordinate with the person or group in your district who manages your email relay. That person or group supports email relay issues for your district, has access to email relay logs for additional troubleshooting and can coordinate with your email relay company's support team to investigate further.</li> </ul> |  |
| Campus<br>Support  | Campus Support does not support third-party email relays and does not have access to third-party email relay error logs.  If your district decides to move to Mailgun for its email relay service, Campus Support will have more investigative resources available, like the Mailgun Message Log.  |  |

# eTranscript

(eTranscript Batch, Electronic Release Setup)

The eTranscript tools allow schools to generate and release an electronic version of student transcripts to third-party vendors (ex. Parchment).

## **Options Available for eTranscript Release**

| District | District should:  |
|----------|---|
|          | Confirm all required setup steps have been completed correctly. See details |
|          | Follow troubleshooting steps to resolve common errors. <u>See details</u>   |



| Third-Party<br>Vendor | <ul> <li>Vendor's Support Team can:</li> <li>Support integration phases that occur after Campus has successfully released data to their system.</li> <li>Clarify their system configuration, logic, tools, and error messages.</li> <li>Investigate when the data in question is present in the XML Campus's system releases but still does not display in the vendor's system.</li> </ul> |
|-----------------------|--|
| Campus<br>Support     | <ul> <li>Campus Support can:</li> <li>Confirm records and their contents are being released for the student in question (by viewing the XML contents).</li> <li>Confirm compliance with the PESC specification.</li> </ul>   |

# **File Transfer to Third-Party Server**

(Data Extract Utility, FRAM Scheduled Imports)

Some Infinite Campus tools can send or receive files from a server over SFTP, FTPS, or SMB. Most of the process is supported by the individual or group in charge of that server, whether in your district or a third-party vendor.

The server manager must provide the correct IP/hostname, port, username, password, and path. Ensure whoever manages the server has allow-listed Campus IP ranges. If your district is self-hosted or in-district hosted, confirm the person who manages your district's network has allow-listed Campus IPs.

# **Options Available for File Transfer Troubleshooting**

| District | <ul> <li>District should:</li> <li>Coordinate with the person or group that manages the server you are sending files to. If your district hosts its own file transfer server, that will be someone at your district. If the file transfer server is hosted by a third-party vendor, contact their support team.</li> </ul> |
|----------|--|
|----------|--|



#### File Server Administrator

(If your district is sending files to a file server hosted by a third party vendor, the file server administrator is an individual or group at that third party. If your district hosts its own file server, an individual or group at your own district is the file server administrator.)

Whoever manages the server you are sending files to should:

- Ensure the Username and Password values for the file server you entered into Campus are correct and up-to-date. (Work with the person who manages the file server to obtain these values.)
- Ensure the Server, Port, and Path values for the file server you entered into Campus are correct and up-to-date. (Work with the person who manages the file server to obtain these values.)

Whoever manages the server you are sending files to is also responsible for supporting:

- Correct configuration of that server and correct network configuration.
- The server's firewall and security software.
- Correct configuration of the account associated with that server (e.g., ensure correct credentials were provided and the account has been granted read/write/add/delete rights to that path of that server, etc.).
- Details on any additional requirements of the server (public key exchange, TLS session resumption, etc.).
- Investigation of errors indicating:
  - Your Campus site is getting no response from that server (e.g., "Connection timed out" or "UnknownHostException").
  - There are permissions or space issues on that server (E.g., "Permission denied," "Access denied," "Auth fail," "Internal server error," etc.).

## Campus Support

#### Campus Support can:

• Confirm the file would be sent to a properly configured file server.

#### **Server Setup**

Consultations on configuring an SFTP/FTPS server or SMB configuration are not services offered by Infinite Campus. Here are some IT-focused communities that may be helpful.

Infinite Campus does not endorse or promote any content shared by these communities. We encourage you to thoroughly review content offered to ensure it meets your needs.

#### **IT-Focused Communities**

r/SysAdmin

SuperUser's SFTP Questions Area



**Spiceworks Community** 

# Google reCaptcha

(Login Security Settings > Google reCaptcha)

After a certain number of consecutive failed login attempts, Infinite Campus presents a CAPTCHA, or login challenge, to to ensure the login attempt is coming from a real person rather than a bot or automated attack. The CAPTCHA Infinite Campus uses by default requires entering letters and numbers from a prompt, but you can configure your site to instead use the CAPTCHA offered by Google: Google reCaptcha.

Google reCaptcha's login challenge typically requires marking an "I'm not a robot" checkbox and/or selecting images that relate to a particular subject.

# **Options Available for Google reCaptcha**

| District          | <ul> <li>For initial implementation, your district should:         <ul> <li>Complete the initial setup, which requires configuration within google.com/recaptcha. Refer to the Google reCaptcha article for more details.</li> </ul> </li> <li>For existing reCaptcha configuration, your district should:         <ul> <li>Coordinate with whoever at your district completed the initial setup within google.com/recaptcha. The setup is stored under that person's Google</li> </ul> </li> </ul> |
|-------------------|---|
|                   | account. If that person is no longer available, the setup may need to be recreated.   |
| Google            | <ul> <li>Support technical issues with Google reCaptcha itself. If you encounter technical issues within the google.com/recaptcha console, visit Google's reCaptcha Help page to learn about the support options Google makes available.</li> </ul>   |
| Campus<br>Support | Campus Support can:  • Confirm Google reCaptcha would work as expected when associated with a correctly-configured <a href="mailto:google.com/recaptcha">google.com/recaptcha</a> setup.  Campus Support does not support technical issues with Google's <a href="mailto:google.com/recaptcha">google.com/recaptcha</a> console.  |

# **Google Drive Integration**



(Google Drive)



Integrating Campus with Google Drive allows teachers and students to use Google Drive files in the classroom. Teachers can attach a Drive file to an assignment that students can open and interact with based on the teacher's sharing preferences. Teachers can also allow students to attach and submit Drive files to assignments in Campus Student.

This is different from the Google *Classroom* assignment/score sync integration. For the Google Classroom assignment/score sync integration, see <u>OneRoster-powered integrations</u>.)

## **Options Available for the Google Drive Integration**

| District       | District can coordinate with your district's Google administrator, who is responsible for:  • Reviewing the Google project that was initially set up (at console.developers.google.com) to ensure the configuration is correct (using Google Drive Configuration > the "Show Me The Steps" walkthrough as a guide).  • Providing the resulting 4 values and .p12 file to the district's Infinite Campus administrator.  • Creating two test Google accounts within admin.google.com, a test student and test teacher account, for troubleshooting purposes. Provide details to the individual in charge of Infinite Campus.  Your district's Infinite Campus administrator must ensure that the 4 values and .p12 file from the console.developers.google.com Google project produced by the district's Google admin are correctly entered into Campus' Google Drive Configuration screen. |
|----------------|--|
| Google         | Google should:  • Support technical issues within Google's  console.developers.google.com console. Select the Support (?) button within console.developers.google.com to see the support options Google offers.  |
| Campus Support | <ul> <li>Campus Support can:</li> <li>Provide a <u>setup guide</u>.</li> <li>Confirm that the values entered into Google Drive Configuration match the expected patterns.</li> </ul>   |

## **LDAP Server**

(LDAP Configuration, LDAPS Certificates)

LDAP is a way to sign into Infinite Campus using the credentials your district stores within its Active Directory (AD) server.



The majority of the LDAP authentication process occurs within your district's LDAP server. Support for this functionality is up to the individual or group at your district in charge of your district's LDAP server. The person who manages the server provides the correct IP/hostname, port, Bind User DN, Bind User Password, User Search Base, and User Search Filter when initially configuring the LDAP connection.

## **Options Available for LDAP Connections**

#### **District**

District can coordinate with the individual or group who manages your district's LDAP server, who is responsible for:

- Configuration of your district's LDAP server.
- Maintaining the LDAP server's security certificate and exporting the
  correct certificate in the correct format so it can be uploaded to Campus.
  This is a critical requirement when LDAPS is enabled (i.e., "Use SSL" is
  marked in LDAP Authentication). See details.
- Configuration of the accounts on your district's LDAP server (usernames, passwords, user attributes).
- LDAP server firewall and security software.
- LDAP server security preferences.

LDAP servers can be configured to lock accounts after a number of failed logins. How long an account is locked and the conditions that trigger the lock are LDAP server preferences are configurable by the individual or group who manages your district's LDAP server. Campus Support does not advise on these preferences. The Campus login screen may show the message, "Your account is locked!", indicating your LDAP server has these settings configured.

Your district's Infinite Campus administrator is responsible for:

- Ensuring Campus user accounts are configured correctly.
  - For example, the User Account has the Authentication Type dropdown set to the correct LDAP option.
  - Username of the user account within Campus matches the username value supplied to Campus by the active directory (AD) of the district's LDAP server. Coordinate with your district's LDAP administrator to confirm this.
- Confirming a valid Search Base, Search Filter, and Bind User credentials have been entered into your Campus site.

## Campus Support

Campus Support can:

- Verify whether your LDAP server is accessible externally.
- For Campus-hosted districts, confirm whether the Campus site itself is experiencing an outage.
- Confirm whether a user is present in the given LDAP server using the given search base and search filter.



## SIF

#### (SIF)

SIF is a standard for data interchange that allows two separate information systems to communicate with each other. SIF sets a standard messaging language and format that defines data objects commonly shared across student information systems and applications.

## **Options Available for SIF**

| District          | <ul> <li>District can:</li> <li>Ensure data is entered properly according to Infinite Campus and state documentation.</li> <li>Review the Sent Message History report to confirm recent sync activity.</li> </ul>  |
|-------------------|--|
| Vendor            | <ul> <li>Your vendor's own support team is responsible for:</li> <li>The phases of the integration that occur after Campus has successfully released data to their system.</li> <li>The phases of the integration before their system has made a request to your Campus site.</li> <li>Setup that occurs within their own system after data has been pulled in from Campus.</li> <li>Questions about their system's logical requirements and how their system makes use of the fields and records your Campus site sent.</li> <li>Clarifying their system's own error messages.</li> </ul> |
| Campus<br>Support | <ul> <li>Campus Support can:</li> <li>Check for misconfiguration within the Campus user interface.</li> <li>Confirm compliance with the SIF specification.</li> <li>Confirm records are made available to the agent.</li> <li>Confirm whether the agent is making requests.</li> </ul>   |

# **SSO Identity Provider System**

#### (SSO Service Provider Configuration)

Single Sign-On (SSO) is a way for users to sign into Infinite Campus using the credentials of another system (Identity Provider). Users do this by clicking a Single Sign-On button or link, which directs them to the login screen of that other system (if they're not already signed into that other system).

## **Options Available for SSO Configuration**



## District District can coordinate with whoever at the district manages the district's Identity Provider (IDP) system, who should: • Set up and configure the integration of the IDP system. • Manage certificates in the IDP system. Your district's Infinite Campus Administrator should: • Ensure the Campus user account is configured correctly. • Ensure the User Account for an example user has the Authentication Type drop-down menu set to the correct SAML option User Account's username within Campus matches the value supplied to Campus by the IDP system. • This is typically the fully qualified account email within the IDP system by default. Third-The identity provider's support team can: **Party** • Address any questions about configuration within the Identity Provider's own Identity system. Provider's Support the processes of renewing certificates and generating Identity Support Provider metadata (either through a Metadata URL or Metadata XML file) **Team** within their own system. These processes are specific to each identity provider; consult your Identity Provider's documentation or support team. Campus Campus Support can: Support • Ensure the Campus integration conforms to the SAML standard. • Provide setup documentation.