



California  
Community  
Colleges

Information  
Security Center

## **TUTORIAL: Restricting .edu Email Access** **A Guide for California Community Colleges | February 2020**

Restricting access for newly created .edu email accounts is a proven way to deter fraudulent applications for the purpose of obtaining a .edu email address. Colleges that restrict use of .edu email accounts to internal college communications have seen an immediate, dramatic decrease in the number of fraudulent applications they receive.

There are numerous approaches to email provisioning. In this tutorial, three possible methods are explained.

- A. Manage Access with Google Apps Organizational Units
- B. Manage Access in Office 365 with Custom Attributes
- C. Manage Access in Office 365 with uPortal

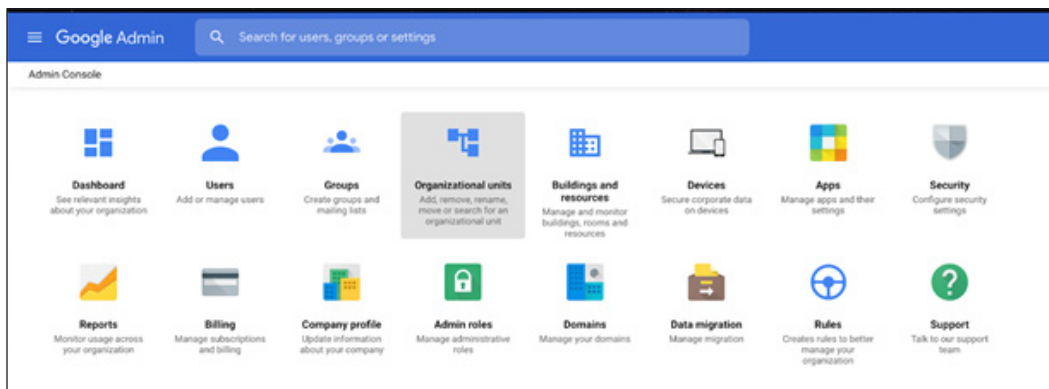
### **A. Manage Access with Google Apps Organizational Units**

Restricting email accounts is a simple process in Google Apps. Here, the administrator creates a new Organizational Unit (OU) in which unrestricted accounts are placed, leaving all others in a default OU. The default OU would be restricted to using the Gmail app, and only allow sending and receiving of email to internal college email domains.

Once a student has signed up for classes these accounts would be moved into the unrestricted Organizational Unit, allowing them to use any of the Google Apps such as Drive and send emails to any domain.

#### **Create an Organizational Unit**

Step 1: In Google Admin console, select Organizational Units option.



## TUTORIAL: Restricting .edu Email Access — Page 2

Step 2: Name the Organizational Unit, and enter the parent domain.

### Create new organizational unit

Create new organizational unit for users who need specific features and settings.

Name of organizational unit\*

Description

Parent organizational unit\*

ccctechcenter.org

CANCEL CREATE

Step 3: Go into G Suite apps access settings.

Google Admin

Search for users, groups or settings

Apps > G Suite

Introducing Groups to enable services.

Easily manage services for a large number of users based on groups such as company, department, client or project. Groups can be aligned with functional roles, which provides them with the right level of access.

Just select a group and turn ON the services.

[ADD GROUPS BASED SERVICES](#) [GOT IT](#)

G Suite

All users in this account

Groups

Organizational Units

Search for organizational units

ccctechcenter.org

CCCTC Support

Google Analytics Only

No CCCTC Access

Service Accounts

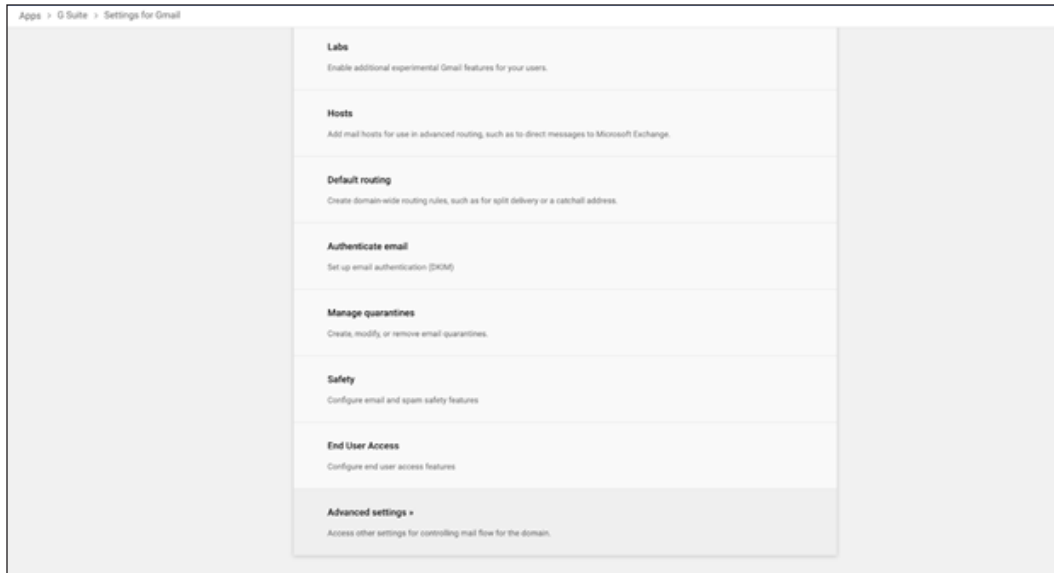
Showing status for apps in No CCCTC Access

Services	Service Status	On/Off Inherit Status
<input type="checkbox"/> Calendar	OFF	Overridden
<input type="checkbox"/> Classroom	OFF	Overridden
<input type="checkbox"/> Drive and Docs	OFF	Overridden
<input type="checkbox"/> Gmail	ON	Inherited
<input type="checkbox"/> Google Chrome Sync	OFF	Overridden
<input type="checkbox"/> Google Hangouts	OFF	Overridden
<input type="checkbox"/> Google Vault	OFF	Overridden

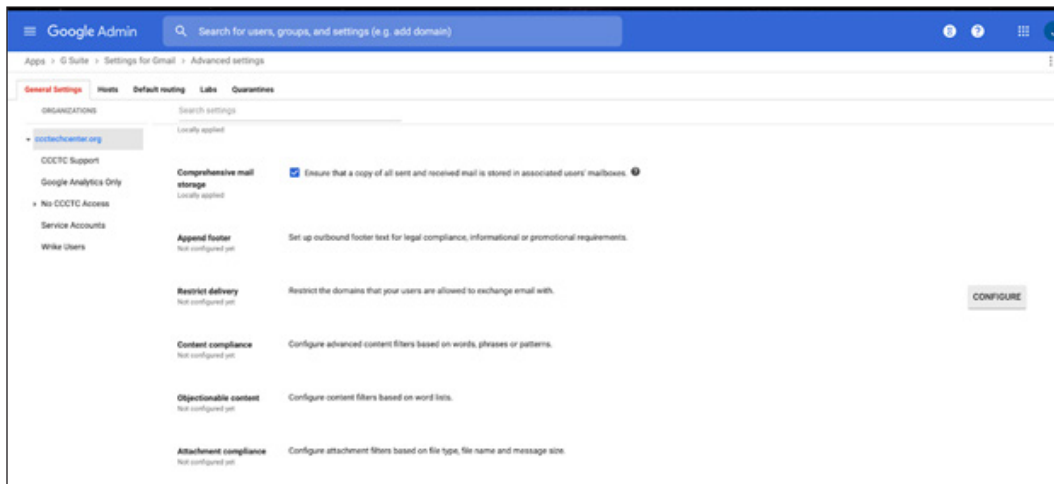
[ADD SERVICES](#)

## TUTORIAL: Restricting .edu Email Access — Page 3

Step 4: Choose Advanced settings.



Step 5: In General Settings, select Restrict delivery option.



## TUTORIAL: Restricting .edu Email Access — Page 4

Step 6: Specify the domain to restrict sending and receiving of messages.

The screenshot shows a dialog box titled "Add setting" with a close button (X) in the top right corner. Below the title is the section "Restrict delivery" with a "Help" link. A text input field contains "butte.edu". Below this is a horizontal line and the instruction: "Only allow sending or receiving of email messages from addresses or domains that you specify." There are three numbered steps: 1. "Add addresses or domains that you want to allow" with a sub-note "No lists used yet. Use existing or create a new one." 2. "All messages to or from other addresses and domains will be rejected. Edit the default rejection notice for these messages. Optional" with a text input field containing "Enter customized rejection notice. (e.g. 'Your email has been rejected because it violates organization policy')." 3. "Options" with a checked checkbox "Bypass this setting for internal messages." At the bottom right are "CANCEL" and "ADD SETTING" buttons. Below the dialog box, there is a faint note: "Configure attachment filters based on file type, file name and message size."

### Removing Restrictions

The process to remove restrictions once a student has signed up for classes will be different for each SIS system. We suggest automating the process by writing a script that, triggered by the SIS generation of a text file when a student signs up for classes, moves the account to the unrestricted OU. One way to do this is using the GAM command line tool to automate management of domain and user settings. A quickstart guide can be found at <https://github.com/jay0lee/GAM>.

## B. Manage Access in Office 365 with Custom Attributes

This process describes an environment using Office 365 with a local Active Directory (AD), and ADSync and Colleague. In this environment, Custom AD attributes (extensionAttributeXX) are coupled with mail transport rules, such that:

1. When new users are provisioned by Colleague into AD, a script that runs every few minutes sets one of the custom attributes to "1".
2. With the custom attribute set to 1, two transport rules set up in Office 365 will block

## **TUTORIAL: Restricting .edu Email Access — Page 5**

incoming and outgoing mail to and from outside domains for these users.

- a. The rule allows these restricted accounts to send to and receive from internal users only.
- b. Exceptions are set up for specific external domains, such as fafsa.gov.

### **Removing Restrictions**

To remove the restrictions, a SQL SSIS package runs every 30 minutes, compares data from Colleague and AD and sets or unsets the attribute on accounts as appropriate. The current criteria for removing the restriction is as simple as possible; if the student has ever registered for a class they are unblocked.

### **C. Manage Access in Office 365 with uPortal**

The following process is also available for colleges using Office 365 with uPortal. Detailed specifications and steps included here are from an actual project implementation at a California community college district.

#### **Specifications Document - Requesting Student Email Account**

##### **Project Scope**

1. To allow eligible students to request a student email account by creating a new tile with a request feature in the new MyPortal (uPortal platform).
2. The email account will be in separate domains with the format: last\_name\_first\_name@student.campus.edu (e.g. doejane@student.collegedomain.edu. Students will select their primary campus, which will be the domain of their email ID.
3. The account will be synchronized with Azure's active directory account and the email account will be provisioned in Office365 in the Microsoft Cloud.
4. Once the account has been created, a notification email will be sent to the student's primary email (as listed in Banner) with instructions on how to access the new email account.
5. If a student email account holder does not register for a class for an academic year, the account will be scheduled for deprovisioning. Warnings will be sent to the student's primary email account after three academic terms of not registering for any classes, and every month henceforth until the account is removed after the third warning.
  1. Notify via primary student email account (three times).
  2. We will support the deprovisioning of the account by student self-service request.
6. Existing employees, including student workers, will be ineligible to request a student email account.
7. If a student later becomes an employee, the student email account will be kept separate, and

## TUTORIAL: Restricting .edu Email Access — Page 6

there will be no migration of the student email content to the new employee email account.

### Critical Success Factors

1. The implementation committee is in agreement on the project scope.
2. The implementation committee is in agreement on the process for students to request the student email account.
3. The project parameters are approved by the technology and other governing committees.
4. The implementation committee will participate regularly in implementation status meeting and provide needed testing and feedback based on the project progress.

### Specifications

Eligibility requirements: To be considered eligible to apply for a student email account, a student must:

1. Be currently registered at one or more colleges within the district.
  - a. To facilitate, a Banner role (“ACTIVE\_TERM\_STUDENT”) will be used.
  - b. Members of this role are those who are classified as “active student” in Banner and enrolled in at least one class in the current term (at either college).
2. Not be an employee of the district.
3. Not already have an existing district student email account.

### Procedure

**1. Request Student Email Account:** A tile in the new MyPortal (available to those who fit the criteria defined in the eligibility requirements above) will be added to allow access to the request/login process.

- A new variable “SE” (added to the GTEMAL table) will be created at this time with the description GTVEMAL\_DESC = ‘FHDA Student Email’.
- After the request is submitted a new record in GOREMAL table will be inserted for the student where GOREMAL\_EMAL\_CODE = ‘SE’ and GOREMAL\_PREFERRED\_IND = ‘N’
- By checking the GOREMAL table it will be known if the request submitted or not.

**2. Select Campus:** The student will choose which campus to identify with.

**Welcome to the student email application page.**

Please select which campus you would like to use for your email domain, then click confirm to continue.

☐ College A: (Your email domain will be student.collegea.edu)

☐ College B: (Your email domain will be student.collegeb.edu)

## TUTORIAL: Restricting .edu Email Access — Page 7

**3. Select Email ID:** The email ID will be a combination of the student's last and first names. For first name, the student's legal or preferred name (the latter must be approved by A&R via the current process and entered into SPAIDEN) will be allowed. If the applicant has a preferred name in Banner(i.e. if SPBPERS\_PREF\_FIRST\_NAME contains data) Applicants will be presented with two choices to select from via radio buttons, lastnamelegalfirstname or lastnamepreferredname (e.g. doejohn or doejohnny).

### Request Student Email

**Now, please read the following notes.**

1. Your email ID will be a combination of your last name, and either your legal first name or preferred first name.

2. If a name combination is already in use, a number will be automatically appended to the ID to make it unique.

**NOTE:** You may choose **PreferredFirstname** if you have it on record with **Admissions and Records**.

If you don't have a preferred first name on record, in order to request it, download and complete the "Add My Preferred First Name" form available in the "My Profile" box on the student or registration tab in MyPortal and submit to Admissions and Records with a copy of a valid photo ID.

Please select your email Id, then click confirm to continue.

☐ Lastname **LegalFirstname**

☐ Lastname **PreferredFirstname**

- If applicant doesn't have a preferred first name and by mistake selects this option, since the preferred first name field in banner is null, it will automatically select the legal first name.
- If either results in a duplicate ID, the digit 2 (or the next unused sequential number if this ID is also taken) will be added to the name to make it unique. There is no user input allowed to create a unique name, just as with staff email IDs today.
  - Example: If Jane Doe applies for a student email account and there is already a doe-jane user, the new account will be assigned doejane1 as its user ID. If another Jane Doe applies in the future, that user will become doejane2, etc.

### Students Email Application

#### Request Student Email

**Thank you! Your student email application has been received.**

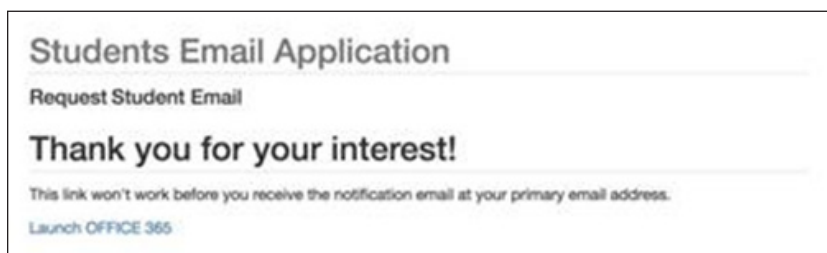
Once your new account had been set up and is ready for use, you will receive a notification email at your primary email address. After you log back into MyPortal, your student email can be accessed via the office 365 link.

**4. Confirmation and Processing:** Once the request has been submitted, the channel will no longer show the Request form.

## TUTORIAL: Restricting .edu Email Access — Page 8

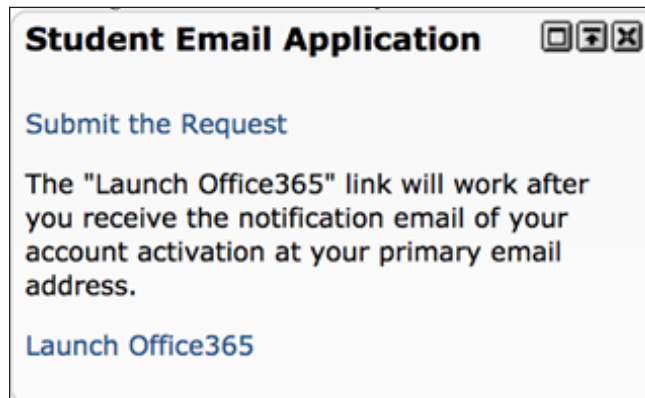
**5. CSV File:** A CSV file (with the CWID as the file name) will be sent to the dirsync server with the information gathered from the application process.

1. Student CWID
2. Campus/Domain
3. Email Alias
4. Event Type (“add”. Other events may be used later, for instance “archive” or “delete”)
5. Personal Email Address



**6. Login Available:** When the account provisioning is complete:

1. Notification email will be sent to the student's primary email address.
2. The new login tile will be available in MyPortal.



3. Within Office 365, there will be an option for the student to request deactivation of the email account.