OnBase Guide - Unity Script - Update Email Address (ICS/HCM)

Goal: To use a script in Workflow or on a Unity form to retrieve a student's or employee's email addresses from Campus Solutions or HCM.

Complexity Level: Departmental Workflow Developers, Departmental Unity Form Developers

12/6/2023

Table of Contents

University of Colorado
Boulder | Colorado Springs | Denver | Anschutz Medical Campus

Background

Scripts are available (one for Workflow, one for Unity forms) to retrieve the email address for a student from Campus Solutions.

It is a best practice to check for the existence of all input values before running the script (ex. if you intend to use the Employee ID keyword as an input to get HCM addresses, check that the Employee ID keyword has a value before attempting the script).

When using email addresses to send notifications, it is also a good idea to validate the email address before attempting the notification send (to ensure that whatever keyword/property value being used as a recipient is a valid email address). More information about validating email addresses is available for workflow in the Commonly Used Expressions guide and for Unity forms in Validating Field Values with RegEx.

Email Address Types

You will need to specify which email type to retrieve from either source. The available options are:

Campus Solutions

Address Type	Description
BLD	Boulder
CONT	Continuing Ed
CUCS	CU Student Preferred
DENH	UC Denver
FAST	Faculty Staff
ISIR	Financial Aid ISIR
PRCU	Pre CU Enrollment
PRIR	Parent ISIR
PRNT	Parent ISIR
PSCU	Post CU Enrollment
UCCS	UCCS

University of Colorado

Boulder | Colorado Springs | Denver | Anschutz Medical Campus

HCM

Address Type
BUSN
BNBI
CAMP
DORM
HOME
OTHR
RPTS
UCB
UCCS
UCD
USYS
ALL*

*ALL is not an HCM value. In the *workflow* script for retrieving email data from HCM, you can set the email type input property to "ALL" to receive a comma-separated list of all distinct email addresses for the employee (ex: name@cu.edu, name@colorado.edu).

Information on inputs and outputs of all Unity scripts are available on the *OnBase Unity Script Inputs and Outputs* administrative reporting dashboard in the Configuration category.

Prerequisites

For Workflow:

> You must have OnBase Studio installed and know how to configure a life cycle. Refer to the [OnBase Client Guides](#) for instructions on installation and to the Workflow MRG for more details as necessary. Contact [UIS_DM_Support@cu.edu](#) for assistance if needed.

For Unity Forms:

> You must be a member of the Unity form developer user group and be familiar with creating form templates and configuring custom actions.

University of Colorado

Boulder | Colorado Springs | Denver | Anschutz Medical Campus

Using the Workflow Scripts

When using script in workflow, input values should be set and/or validated, then an action runs the script to retrieve output values. You can then use the output values with any of the actions/rules available for properties.

Using the ICS Workflow Script

This script takes a student ID and the email type you provide and outputs the appropriate email address to a property value, which you can then copy to a keyword value, or use in another manner.
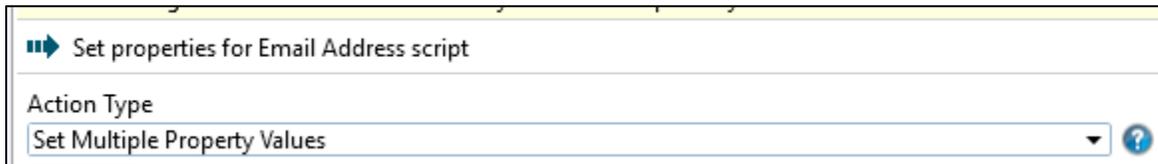
Certain values are required for the script to retrieve the desired email address:
- Student ID (keyword value)
- UnityScriptResult (property)
- ScriptError (property)
- EmailAddressType (property)
- EmailKWToUpdate (property)

When setting any property values to run a script, be sure to note which property bag is being used and be consistent with this selection.

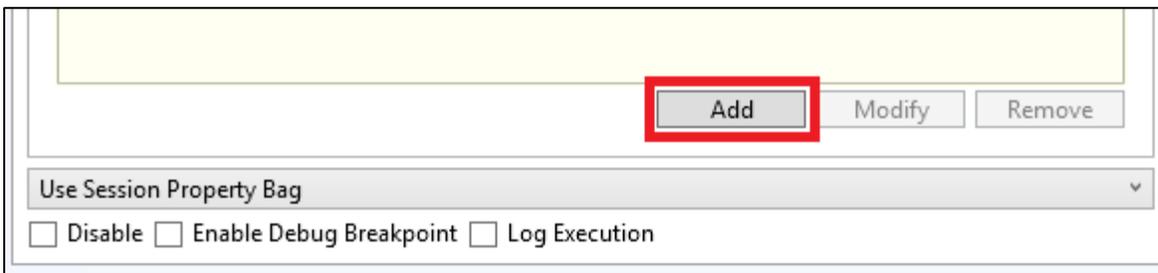### Set Property Values Needed for Script

Create an action and choose the **Set Multiple Property Values** action type.

Click **Add** at the bottom of the panel at the right side to add a new property value.

Enter the following values to set the **UnityScriptResult** property:
- Property Name: UnityScriptResult
- Constant Value: Initialized

University of Colorado
Boulder | Colorado Springs | Denver | Anschutz Medical Campus

Then click **OK**.

Click **Add** at the bottom of the panel at the right side to add a new property value and enter the following values to set the **ScriptError** property:

- Property Name: ScriptError
- Constant Value: [leave blank]

University of Colorado

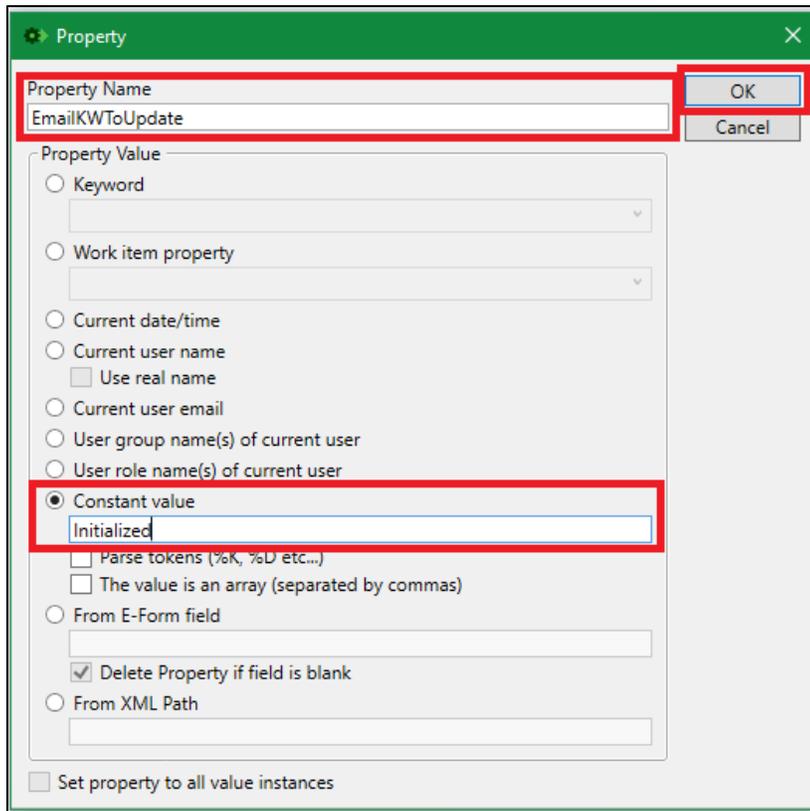Boulder | Colorado Springs | Denver | Anschutz Medical Campus

Then click **OK**.

Click **Add** at the bottom of the panel at the right side to add a new property value and enter the following values to set the **EmailAddressType** property:

- Property Name: EmailAddressType
- Constant Value: [enter desired "Field Value" from chart above]

University of Colorado

Boulder | Colorado Springs | Denver | Anschutz Medical Campus
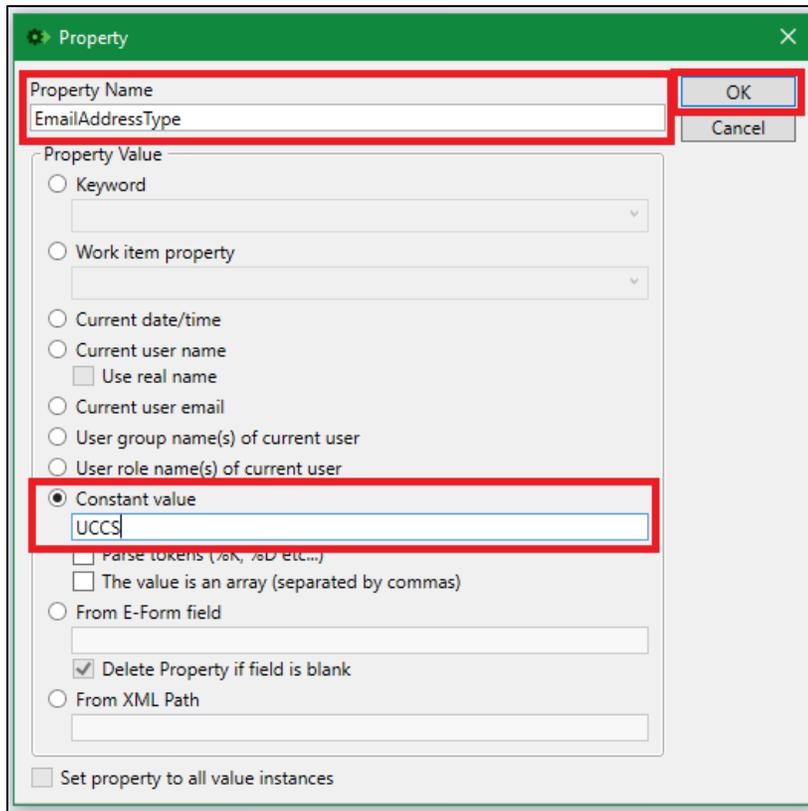
Then click **OK**.

Click **Add** at the bottom of the panel at the right side to add a new property value and enter the following values to set the **EmailKWToUpdate** property:
- Property Name: EmailKWToUpdate
- Constant Value: Initialized

University of Colorado
Boulder | Colorado Springs | Denver | Anschutz Medical Campus

Then click **OK**. Overall, the Set Multiple Property Values action should look like this when complete:

University of Colorado

Boulder | Colorado Springs | Denver | Anschutz Medical Campus
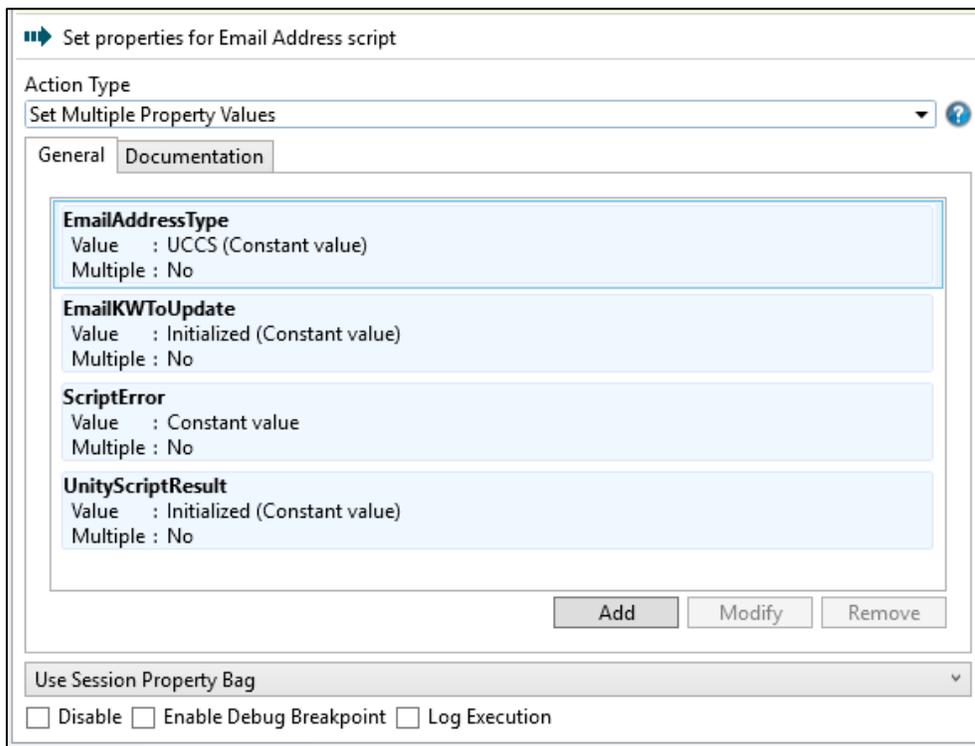
Run the Script

Create a "Run Unity Script" action. Select "**GEN – ICS – Update Email Address**" from the list of available scripts. Check the box to Refresh item after script has executed.
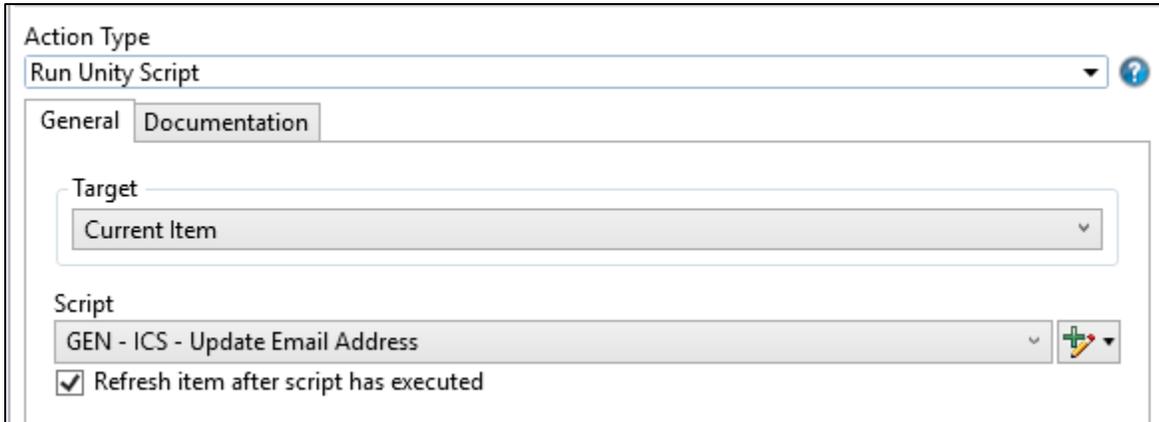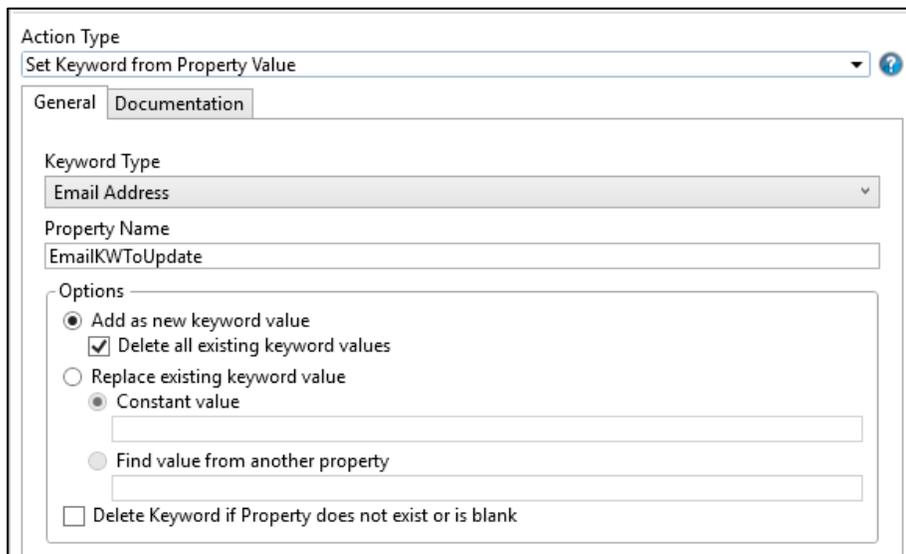

When the script runs, it will update the EmailKWToUpdate property value with the student's email address.
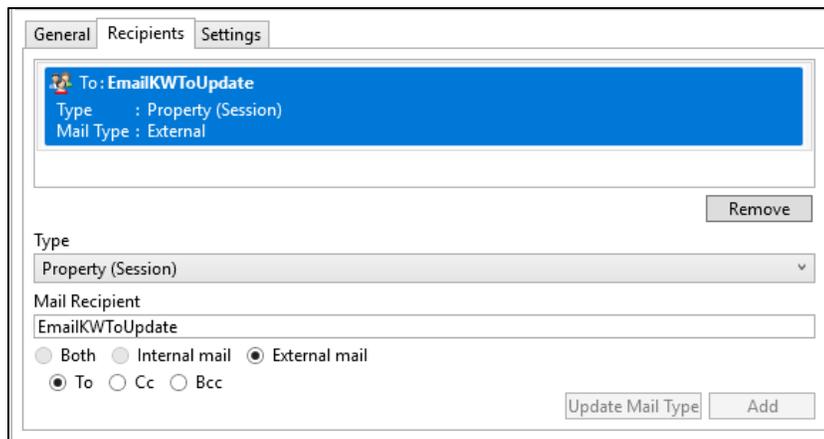
Use the Script Results

After the script runs, you can then copy the EmailKWToUpdate property value to whatever keyword you wish, or use it with a notification, or use it for anything else you can do with properties.

Use the "Set Keyword from Property Value" action type to copy the value to a keyword value.

The property value can also be used as a notification recipient.

University of Colorado
Boulder | Colorado Springs | Denver | Anschutz Medical Campus

NOTE: This requires the property to be stored as a Session property value, so be sure to configure the property accordingly if this is your intended use.

Using the HCM Workflow Script

This script uses the employee ID. If desired, you can also provide an email address type. When the script runs, the specified email address is set to a property value, which you can then copy to a keyword value, or use in another manner.

Certain values are required for the script to retrieve the desired email address:
- Employee ID (keyword value, or if no keyword value exists, the EmployeeID property value can be used instead)
- EmailAddressType (property, optional input)
- UnityScriptResult (property, output)
- ScriptError (property, output)
- EmailAddress (property, output)

If no email address type is specified, the output will be the person's preferred email address.
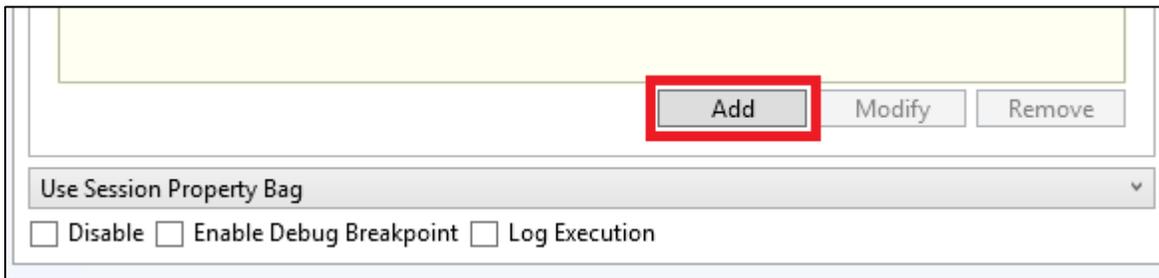
When setting any property values to run a script, be sure to note which property bag is being used and be consistent with this selection.

Set Property Values Needed for Script

Create an action and choose the **Set Multiple Property Values** action type.

University of Colorado

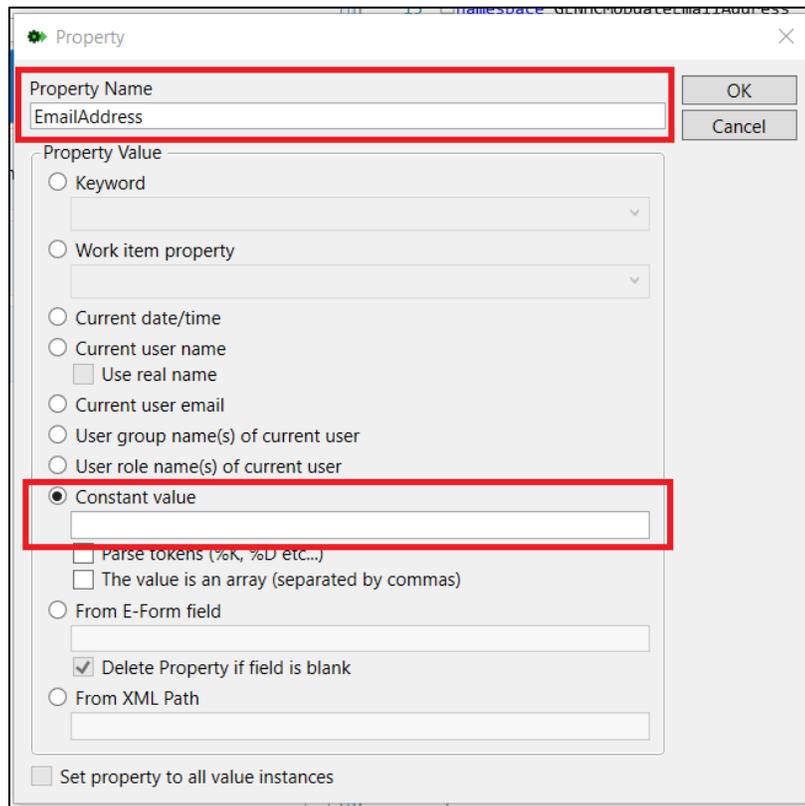Boulder | Colorado Springs | Denver | Anschutz Medical Campus

Click **Add** at the bottom of the panel at the right side to add a new property value.

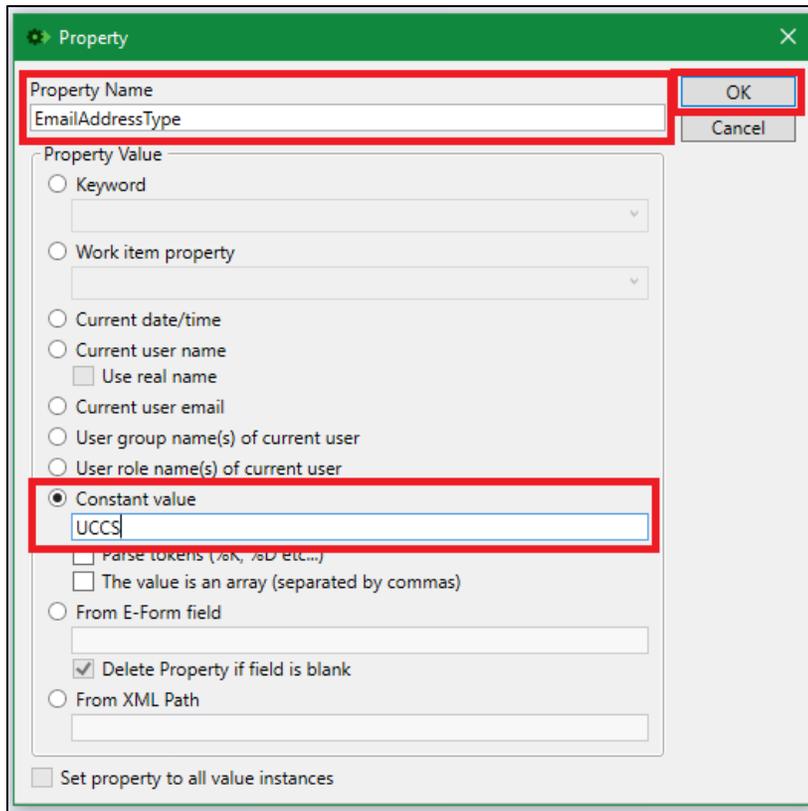Enter the following values to set the **EmailAddress** property:
- Property Name: EmailAddress
- Constant Value: [leave blank]

Click **Add** at the bottom of the panel at the right side to add a new property value and enter the following values to set the **EmailAddressType** property (optional):
- Property Name: EmailAddressType
- Constant Value: [enter desired "Field Value" from chart above]

12

Then click **OK**.

Click **Add** at the bottom of the panel at the right side to add a new property value and enter the following values to set the **UnityScriptResult** property:
- Property Name: UnityScriptResult
- Constant Value: [leave blank]

University of Colorado

Boulder | Colorado Springs | Denver | Anschutz Medical Campus

Then click **OK**.

Click **Add** at the bottom of the panel at the right side to add a new property value and enter the following values to set the **ScriptError** property:
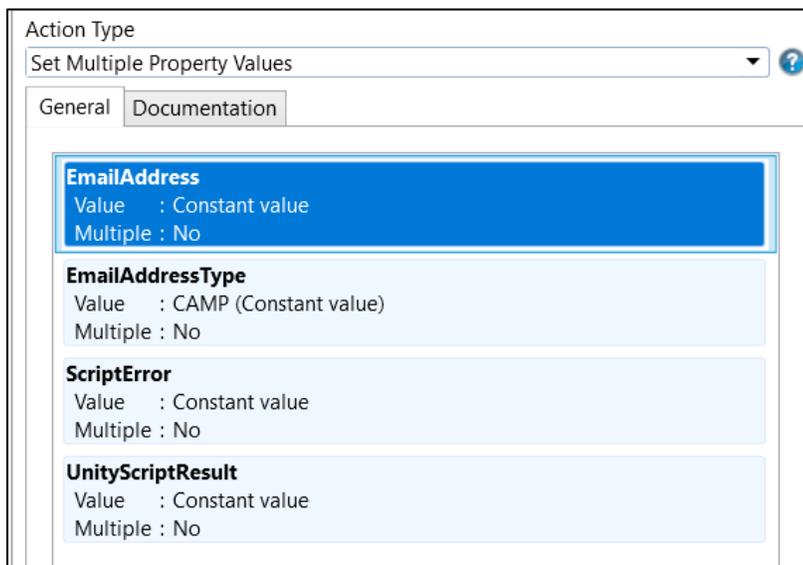
- Property Name: ScriptError
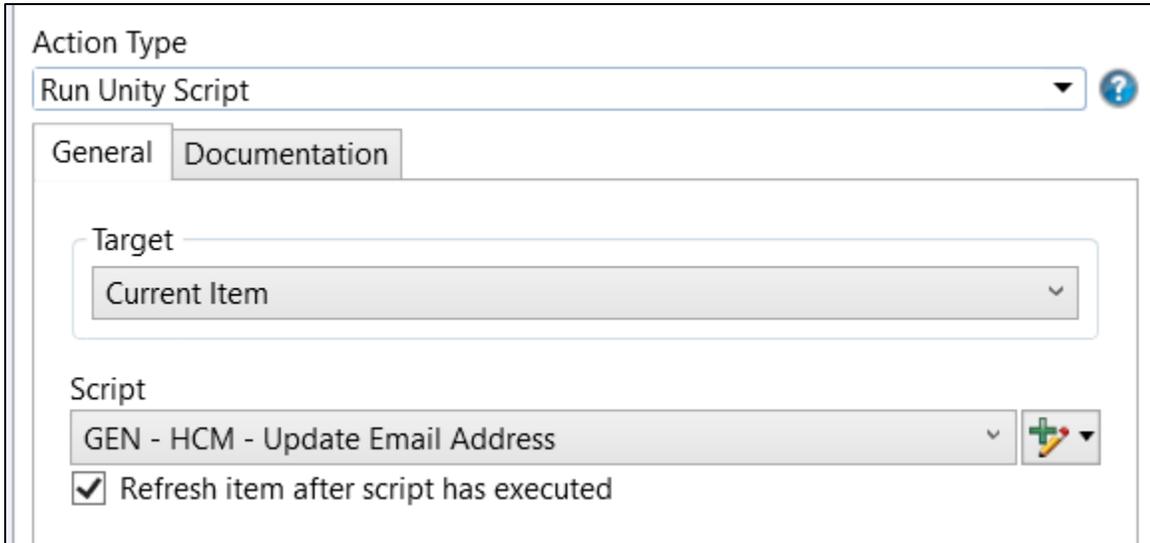- Constant Value: [leave blank]

Then click **OK**.

Then click **OK**. Overall, the Set Multiple Property Values action should look like this when complete:

University of Colorado

Boulder | Colorado Springs | Denver | Anschutz Medical Campus

Run the Script

Create a "Run Unity Script" action. Select "**GEN – HCM – Update Email Address**" from the list of available scripts. Check the box to Refresh item after script has executed.

When the script runs, it will update the EmailAddress property value with the person's email address.

Use the Script Results

After the script runs, you can then copy the EmailAddress property value to whatever keyword you wish, or use it with a notification, or use it for anything else you can do with properties.

Use the "Set Keyword from Property Value" action type to copy the value to a keyword value.

University of Colorado
Boulder | Colorado Springs | Denver | Anschutz Medical Campus

The property value can also be used as a notification recipient.

NOTE: This requires the property to be stored as a Session property value, so be sure to configure the property accordingly if this is your intended use.

Troubleshooting Scripts in Workflow

If you encounter an issue, checking the values of the UnityScriptResult and ScriptError properties may provide helpful information for determining the cause of the issue.

You can do this by:
- Logging the property values to a note (please only do so while testing/troubleshooting)
- Logging the property values to document history (please only do so while testing/troubleshooting)
- Using On Demand Diagnostics

17

University of Colorado
Boulder | Colorado Springs | Denver | Anschutz Medical Campus

Using the Unity Form Scripts

These form scripts do not directly update a keyword type but update a form field which may be mapped to a keyword type or stored as a non-keyword form field. The correct fields need to be configured, then a custom action runs the script.

Configuring Form Fields

Certain field IDs must be used for the email address scripts to work.

For the Campus Solutions script, you will need:

Value	Field ID	Used as
Student ID	StudentID_pre	Input, required
Email Address	email_address	Output, required
Email Address Type	email_type	Input, required

The email address type field can be hidden. Set a value for the field (default value or set by custom action) for the field based on the email address types above.

University of Colorado

Boulder | Colorado Springs | Denver | Anschutz Medical Campus
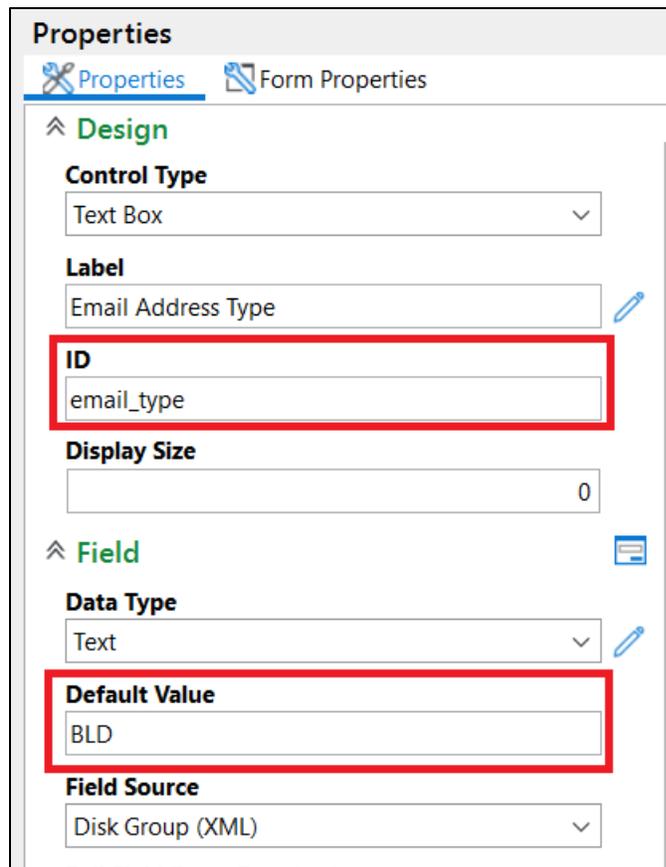
For the HCM Script, you will need:

Value	Field ID	Used as
Employee ID	EmployeeID_pre	Input, required
Email Address	email_addr	Output, required
Email Type	email_addr_type	Input, optional

If no email address type is specified for the HCM script, it will return the employee's preferred email address in HCM.

Troubleshooting Form Scripts

If you'd like to include error messages, you can add the following output fields (these are optional):

Value	Field ID
General Error Message (all scripts)	error_message
Error Messages for the ICS email script only	error_message_GENUpdateEmailAddress
Error Messages for the HCM email script only	error_message_GENHCMGetEmailAddressUNITYFORM

University of Colorado
Boulder | Colorado Springs | Denver | Anschutz Medical Campus

Custom Action to Execute Script

A custom action is required in order to execute a Unity script. Create a custom action with the desired conditions, then add an action to execute the **GEN - ICS - Update Email Address [UNITY FORM]** or **GEN - HCM - Update Email Address [UNITY FORM]** script.

At a minimum, you should check for the Student ID and email address type field being populated if using the ICS script and the Employee ID field being populated if using the HCM script, but you may wish to add other conditions such as:
- Form is new (to prevent the script running every time the form is viewed after submission)
- Name fields being populated and valid, through whatever identity validation you are performing