## Introduction to General Ledger in ARC

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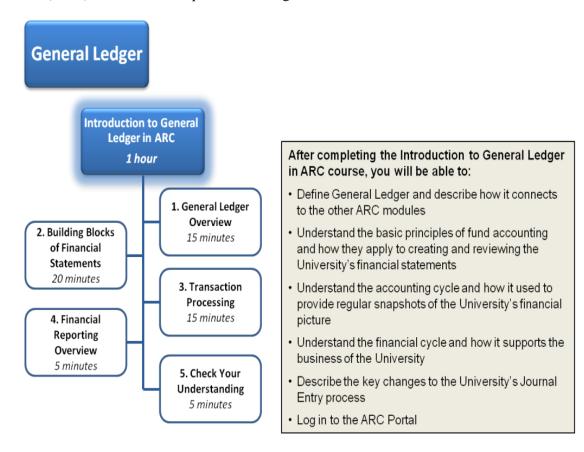
### Introduction to General Ledger in ARC



### **Introduction to General Ledger in ARC**

This is the Introduction to General Ledger in ARC course within the General Ledger curriculum.

If you need a reminder on how to navigate through this course using ARC's web-based training tool (WBT), click here for a quick reference guide.





### General Ledger Overview

This is the *General Ledger Overview lesson* of the *Introduction to General Ledger in ARC* course. Upon completion of this lesson, you will be able to:

- Define Columbia's General Ledger and describe how it connects with ARC's other modules
- Understand the basic principles of fund accounting and how they apply to creating and reviewing Columbia's financial statements
- Describe how the General Ledger is organized

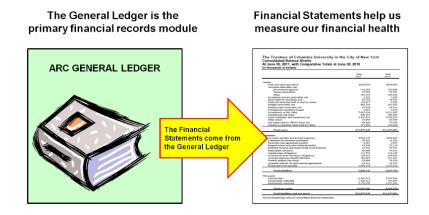
**Estimated Time to Complete Lesson:** 15 minutes



### The General Ledger

### What is a General Ledger?

The *General Ledger* provides a financial picture of the University at any point in time. When money is spent or received, the GL is updated with accounting entries to serve as the official 'book of record' for Columbia University. Columbia generates financial statements based on the information recorded in the General Ledger to measure overall financial health. There are two types of financial statements: The Balance Sheet and the Statement of Activities. We will review each in greater detail.





### The Modules in ARC

### The Modules in ARC

To provide a complete financial picture for the University, the General Ledger must be connected with ARC's other modules (Commitment Control, Accounts Payable, Purchasing, and Project Costing) as well as various integrating systems so that all necessary accounting entries are passed to the General Ledger for posting. From this posted accounting data, you can obtain both summary and detailed accounting information and produce numerous financial reports for your department and/or School/Administrative Unit.

#### **ARC's Commitment Control Module**

The *Commitment Control* module, which is also referred to as "KK" or the "Budget Checking" module, is tightly integrated with the General Ledger. Commitment Control (KK) is used for both budget checking and encumbrance management and also helps in tracking the actual expenses incurred through each module. KK enables an organization to measure expenditures against predefined, authorized budgets and apply budget checking where applicable.

### ARC's Procurement Modules (ePro, Purchasing, Accounts Payable)

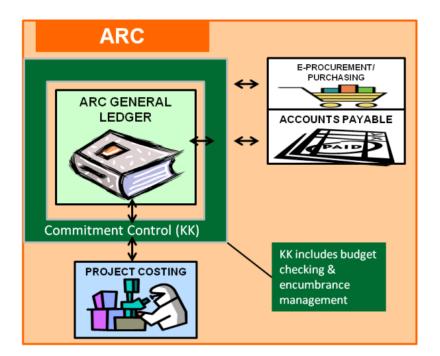
Procurement activities happen in one of three modules within ARC: Accounts Payable, eProcurement, and Purchasing. These modules encompass the end-to-end procure-to-pay process. The procure-to-pay process refers to all of the actions required to make purchases and provide appropriate payment/reimbursement for these purchases. The Procurement modules enable the University to transact with vendors, suppliers and employees, in an efficient and effective way.

#### **ARC's Project Costing Module**

Project Costing is a module used to track and aggregate project-related costs. It can be thought of as a repository of project lifecycle information for budgeting, life-to-date actuals, encumbrances, sponsored billing, and reporting purposes, and it also provides a place to store additional attributes applicable to a single project.

The following is a picture of how ARC's modules fit together:



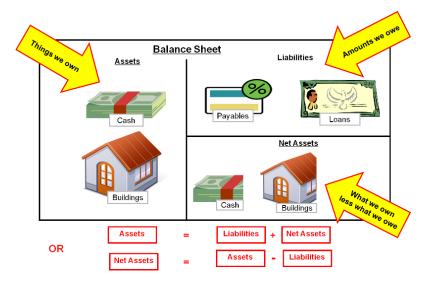




### Financial Statements - The Balance Sheet The Balance Sheet

The University's Balance Sheet tracks Assets, Liabilities and Net Assets. **Assets** are things that the University owns. They are the resources that have been acquired through transactions and have future economic value that can be measured and expressed in dollars. **Liabilities** are obligations of the University; they are amounts owed to creditors and they usually have the word "payable" in their account title. Along with the **Net Assets**, liabilities can be thought of as a source of the company's assets.

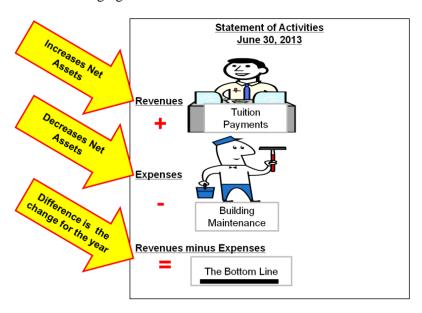
As the name implies, a balance sheet shows precisely how assets are equal to liabilities.





### Financial Statements - Statement of Activities Statement of Activities

The Statement of Activities provides a different way at reviewing Net Assets by summarizing revenues and expenses. In contrast to a balance sheet, the Statement of Activities depicts what happened to Net Assets over a month, quarter, or year. It is based on a fundamental accounting equation (Change in Net Assets = Revenue - Expenses) and shows the rate at which the Net Assets is changing over time.

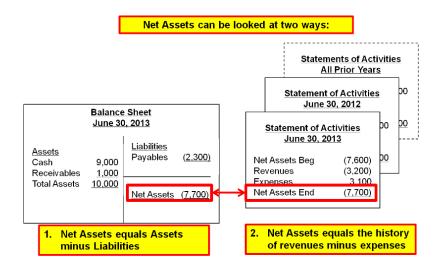




# **How Financial Statements Fit Together How Financial Statements Fit Together**

Net Assets can be looked at two ways:

- 1. Net Assets equals Assets minus Liabilities
- 2. Net Assets equals the history of revenues minus expenses

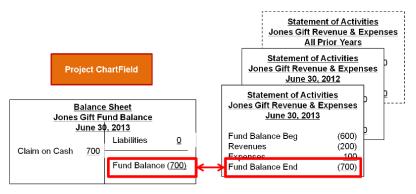




### **Specific Funds Have Financial Statements**

### **Specific Funds Have Financial Statements**

- Specific funding sources (found in the Project ChartField) have Fund Balances
- If you add up all Fund Balances they equal Columbia's total Net Assets
- Fund Balances tell us how much is left to spend (or if it is in "overdraft")



Fund Balance = Assets - Liabilities

Fund Balance = History of Revenues - Expenses

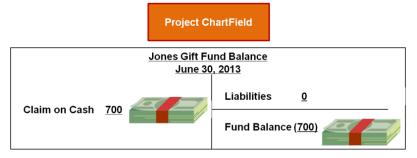


### **Claim on Cash**

### **Claim on Cash**

A final key concept to understand when reviewing financial statements is "Claim on Cash".

- "Claim on Cash" is the amount of cash a specific fund has provided to the University and therefore has a claim to
- If there are no other assets or liabilities, Claim on Cash equals Fund Balance
- However, if there are receivables (or other non-cash assets), the Claim on Cash is less than the Fund Balance



Assets = Liabilities + Fund Balance



### **Building Blocks of Financial Statements**

This is the *Building Blocks of Financial Statements* lesson of the *Introduction to General Ledger in ARC* course. Upon completion of this lesson you will be able to:

- Describe the four key building blocks of the financial statements
- Define basic accounting language such as debits and credits
- Gain a general understanding of how to interpret a Balance Sheet

**Estimated Time to Complete Lesson:** 20 minutes



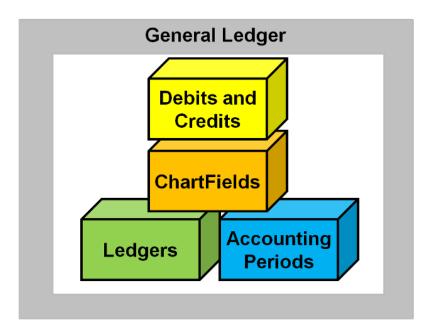
### The Organization of Financial Information

### **The Organization of Financial Information**

The key building blocks of the Financial Statements are:

- Ledgers
- Accounting Periods
- ChartFields
- Debits and Credits

These building blocks are all stored in the General Ledger in order to generate Financial Statements.





### Ledgers



Ledgers are sets of numbers that must be tracked separately.

ARC organizes ledgers into groups. These ledger groups keep data organized for access and reporting purposes.

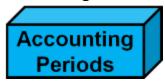
For purposes of transacting, School/Administrative Department users will post directly to the **Actuals** Ledger Group in ARC. The Budget Ledger generally comes from the Budget Tool (Project Budgets may come from other sources such as InfoEd) and the Encumbrances Ledger comes from the Purchasing Module.

Most ledgers are included for reporting purposes.

		Actual to Date		Commitments		
Account Account Description	Budget	Month	Year	Encumbrance		
40000 Tuition	(750,000)	_	(750,000)			
40540 Lab fees	(40,000)	(5,000)	(30,000)			
Total Revenue	(840,000)	(5,000)	(850,000)	-		
53300 Officer of admin	60,000	5,000	45,000	15,000		
54600 Support staff	25,000	2,083	18,750	6,250		
59010 Fringe	160,050	13,888	124,988	41,663		
Sub-Total Salary and Fringe	645,050	55,971	503,738	167,913		
61400 Supplies	80,000	10.000	60,000	5,000		
63005 Rent	60,000	5,000	45,000	5,000		
65405 Utilities	30,000	3,000	21,000			
Sub-Total OTPS	170,000	18,000	126,000	10,000		

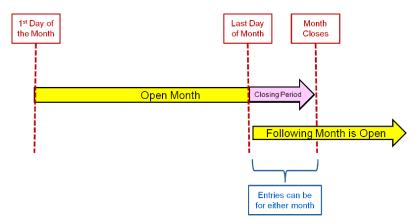


### **Accounting Periods**



Transactions must be posted to the time period they relate to.

On the first day of the month, ledgers can begin to receive accounting entries for that month. On the last day of the month, the University attempts to 'close the books' on ledgers in order to generate Financial Statements. During the transition from month to the next, there is a brief amount of time when the ledgers are open to make accruals and adjustments to that month as well as to begin making entries in the following month.

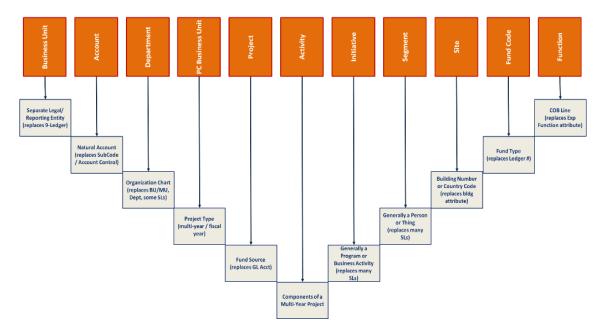




### **ChartFields**



- ChartFields are the way we organize financial information in ARC
- ChartFields are recorded on every transaction





### **Debits and Credits**



Debits and credits are basic terms in the language of accounting. They are also visible in the Financial Statements you review.

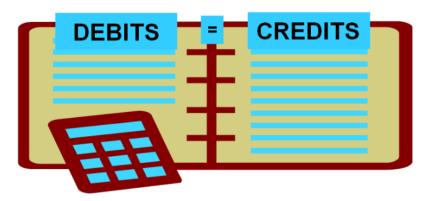
### **Debits are entered on the left:**

- Increases to Assets are Debits (even though this is counterintuitive)
- Decreases in Net Assets are Debits
- Expenses are Debits

### Credits are entered on the right

- Increases to Liabilities and Net Assets are Credits
- Revenues are Credits

We will use the balance sheet to explain why each debits equal credits.





#### The Balance Sheet - Debits and Credits

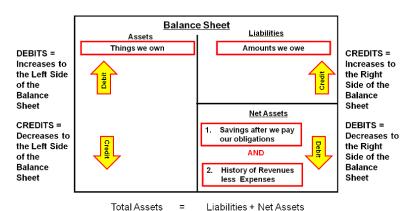


### The Balance Sheet

Equal debits and credits on any transaction is the basic rule of double-entry accounting. The result is a "balanced general ledger" in which the left side (debits) of the ledger equals the right side (credits). The balanced general ledger concept is generally referred to as a Balance Sheet.

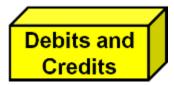
There are two important concepts to get used to when thinking about debits and credits:

- Because debits are increases to assets, something you would think of as a credit in a bank account (i.e., a deposit) is actually a debit to "Cash in the Bank" on the balance sheet. Credits to assets like Cash in the Bank are actually decreases for accounting
- In the system and in many system-generated reports, credits will shown as negatives. So a credit to revenues is a good thing, it means we earned revenue, but it is going to show up in the system and reports as negative to distinguish debits from credits.

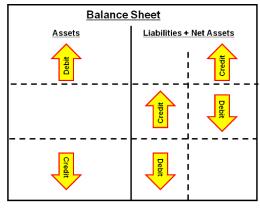




### The Balance Sheet Continued



- Tuition revenue increases net assets and cash
- We charge supplies
   expense on a credit card –
   the expense reduces net
   assets and increases
   liabilities
- We pay the credit card company – which reduces cash and the liability

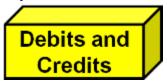


Total Assets

Liabilities + Net Assets

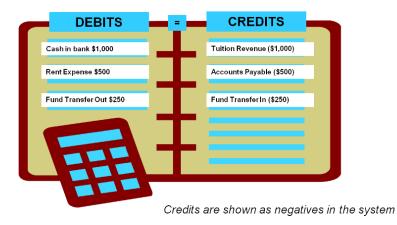


### **Equal Debits and Credits**



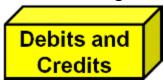
Equal debits and credits on a transaction is the rule of double-entry accounting.

Here are some examples:





### The Accounting ChartField + Debits and Credits



### The Account ChartField + Debits and Credits

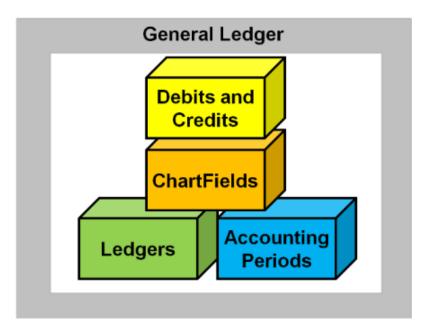
Account is the key ChartField for Debits and Credits. Accounts have 5 digits - the first digit tells us the type of Account. See the table below for specific examples:

Natural Acct Numbering Scheme	Examples	Are Increases Debits or Credits?
1xxxx = Assets	10000 = Cash	Debits
2xxxx = Liabilities	20000 = Vouchers Payable	Oredits
3xxxx = Fund Balance	30000 = Fund Balance	Oredits
4xxxx = Revenues	40000 = Tuition	Oredits
5xxxx = Payroll Expenses	50000 = Salaries	Debits
6xxxx = OTPS Expenses	62020 = Printing Costs	Debits
7xxxx = Internal Transfers	75400 = General Funds Transfer	Transfers In are Credits, Transfers Out are Debits



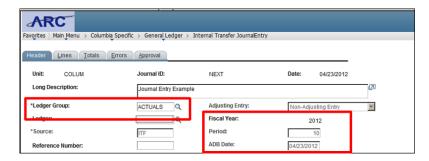
### **Putting it Together**

### **Putting it Together**



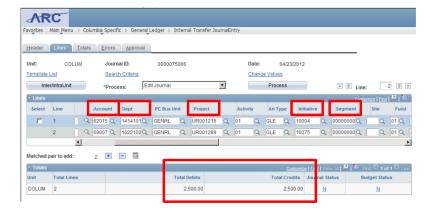
Now, let's have a look at a Journal Entry as it appears in ARC to tie some of these building blocks together.

The Header of a Journal Entry shows the Ledger and the Accounting Period.



The Lines of a Journal Entry shows the ChartFields and the Debits and Credits.







### **Transaction Processing**

This is the *Transaction Processing* lesson of the *Introduction to General Ledger in ARC* course. Upon completion of this lesson, you will be able to:

- Describe the different kinds of journal entries in ARC
- Describe the main processes that a journal must go through once its created
- List the basic steps involved in the accounting cycle

**Estimated Time to Complete Lesson:** 15 minutes

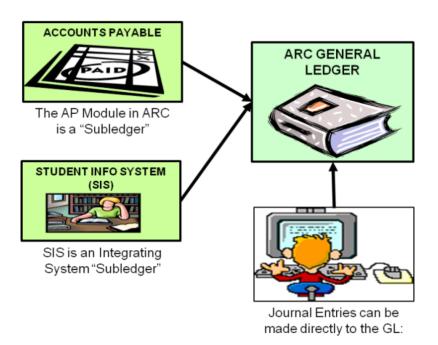


## **Journal Entries Overview Journal Entries Overview**

As we said at the beginning, the *General Ledger* module is the 'book of record' for Columbia University. While the General Ledger is a standalone module, it is very connected to all the other modules in ARC as well as various integrating systems because the other modules and systems create accounting entries that are passed to the General Ledger for posting. From this posted accounting data, you can obtain both detail and summary accounting information and produce numerous financial reports for your department and/or school/administrative unit.

All transaction information comes into ARC's GL through Journal Entries (even systems that feed the GL are posting double sided journal entries behind the scenes). Examples include:

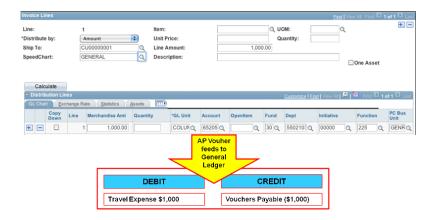
- Transactions from other ARC modules (such as AP) and from Integrating systems like SIS transaction systems feed into the GL
- Internal Transfers and General Journal Entries are made by users to update the GL





### **All Entries Follow the Rules**

AP entries have equal Debits and Credits, even if you don't see both sides of the equation.





# Steps a Journal Entry Goes Through to Post to the GL Journal Processing

Journal processing involves the following steps:

- 1. Creating or updating a journal entry
- 2. Adding "Header" information, including the date, a description of the reason for the entry, a ledger group, etc
- 3. Inputting the ChartStrings and the amount for each line
- 4. Processing the journal entry through combo edits, budget checks, and approvals (workflow)
- 5. Posting the journal entry to the General Ledger

Accuracy of journal entries is important because this process updates balances in each of the ChartFields for reporting purposes and maintains the correct balance in the General Ledger and facilitates reconciliations.

The image below summarizes the main processes a journal must go through once it's created:



The Journal Edit process ensures that ChartField values are valid, debits equal credits, and journal entries are flagged for posting to the target ledger.



The Budget Check process ensures commitments and expenditures are controlled by checking the transaction against predefined, authorized budgets.



The Approval process routes the journal to predefined authorizers through workflow. The journal may be routed to one or more approvers. A journal can only be posted if all approvers approve the journal.



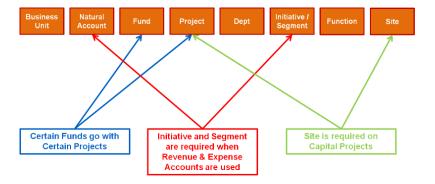
Journal posting is the last step of journal entry processing. After journal posting, a user can no longer edit the entry. A journal can only be posted after it has been successfully edit checked, budget checked, and approved.



# Edit Check Edit Check

"Edit Check" makes sure that ChartField combinations are valid.

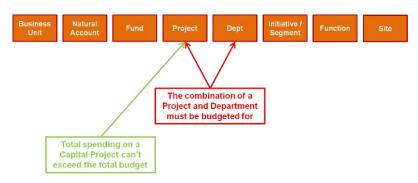
Here are some examples:





### Budget Check Budget Check

"Budget Check" makes sure that a transaction meets budget rules.

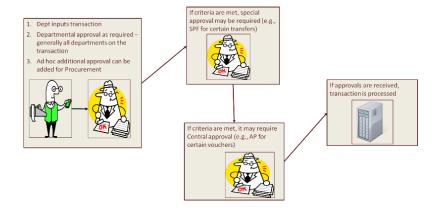




# Approving a Journal Entry Approving a Journal Entry

"Workflow" is the term that ARC uses to describe and manage the approval process.

- Criteria determines if a transaction should be routed (e.g. a cost transfer to a grant account)
- Transactions that meet the criteria are routed to users based on workflow roles (e.g. SPF)

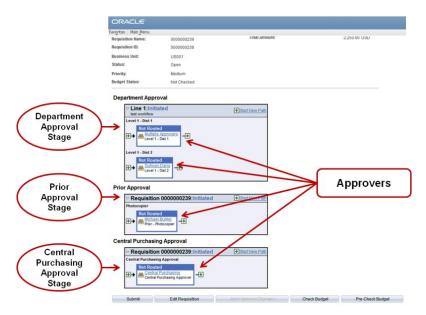




### **Sample of Approval Stages**

### Sample of Approval Steps

View predefined transaction approval routing path.





### The Accounting Cycle

### **The Accounting Cycle**

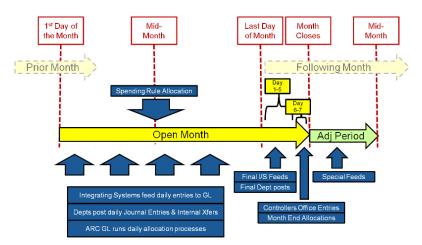
The Accounting Cycle is a series of activities that begins with business transactions and ends each reporting period with the closing of the books in order to create financial statements for internal and external stakeholders to monitor the University's overall financial health. Because this standard process recurs with each new accounting period (typically there are monthly/quarterly/annual accounting periods), it is referred to as the Accounting Cycle and it consists of the following basic steps:





### **Closing the Books**

Every institution approaches the accounting cycle a little bit differently, but the basic components are the same. At Columbia, financial managers and the Controller's Office work together each month to complete the full accounting cycle as depicted here:





### Financial Reporting Overview

This is the *Financial Reporting Overview* lesson of the *Introduction to General Ledger in ARC* course. Upon completion of this lesson, you will be able to:

• Access the ARC Portal from my.columbia.edu

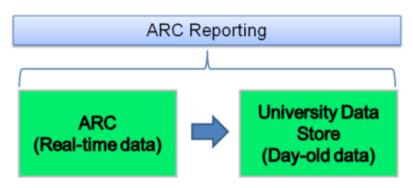
**Estimated Time to Complete Lesson:** 5 minutes



### What's Changing?

The new reporting solution streamlines the reporting environments into two databases: ARC and the University Data Store (UDS). The University Data Store (UDS) is the new data warehouse repository, where data from ARC, PAC/LA, Student, and Historical/Legacy system data will be stored. The ARC portal is a one stop shop where the majority of financial reporting can be accessed.

The following image shows the ARC reporting solution:

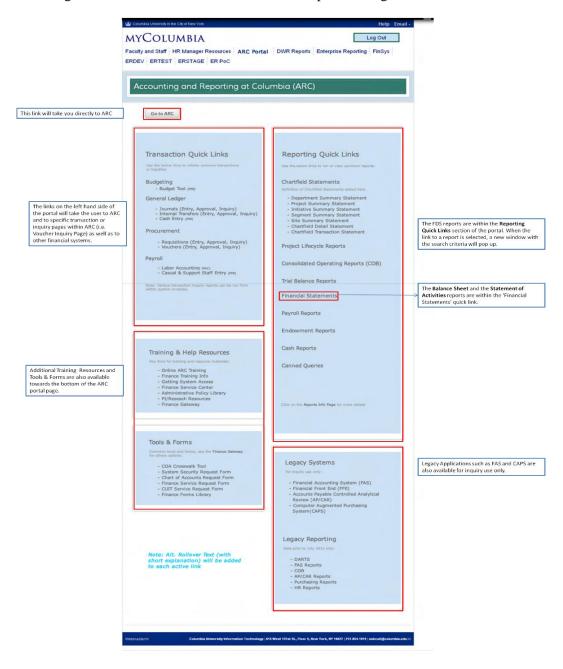




#### Introduction to the ARC Portal

The ARC Portal is the entry into the reporting environments. To access the ARC portal log into MyColumbia using your uni id and password and click on the ARC Portal hyperlink.

The image below describes how the content on the portal is organized.





### Log In to the ARC Portal

In this topic you will learn how to log in to the ARC portal.

**Estimated Time to Complete This Topic:** 2 minutes

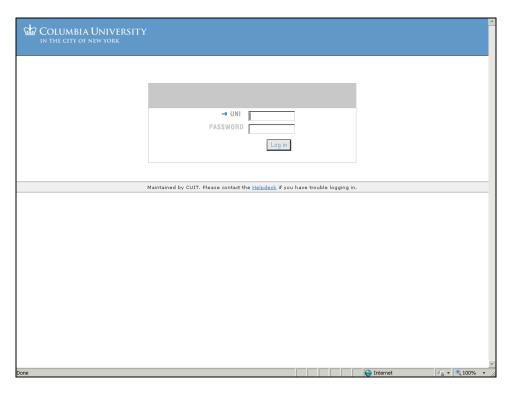
#### Procedure

Welcome to the *Log In to the ARC Portal* topic. In this scenario you will learn how to log in to the portal.

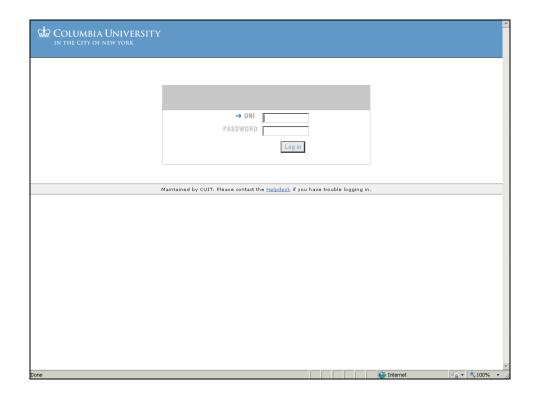


Step	Action
1.	Click the <b>Log In Now</b> link.
	Log In Now



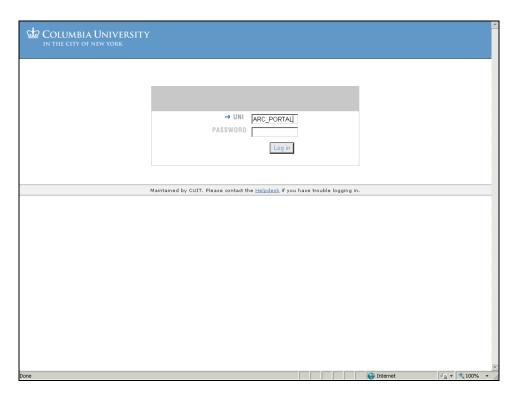


Step	Action
2.	In this simulation, you will enter a generic UNI and Password. Once you have
	access to the ARC Portal you will enter your UNI and Password.



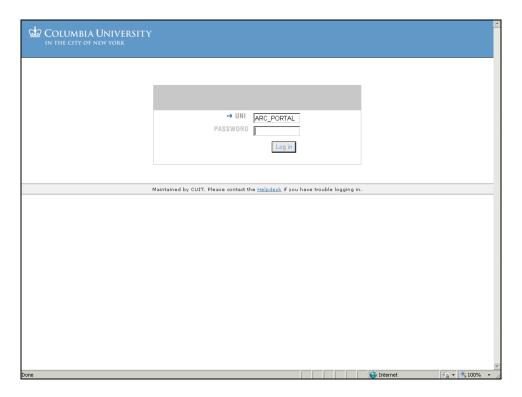


Step	Action
3.	Enter the desired information into the <b>Log in</b> field. Enter " <b>ARC_PORTAL</b> ".

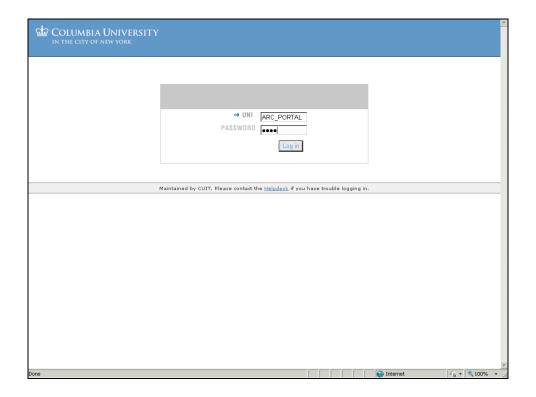


Step	Action
4.	Click in the <b>Password</b> field.





Step	Action
5.	Enter the desired information into the <b>Password</b> field. Enter "test".



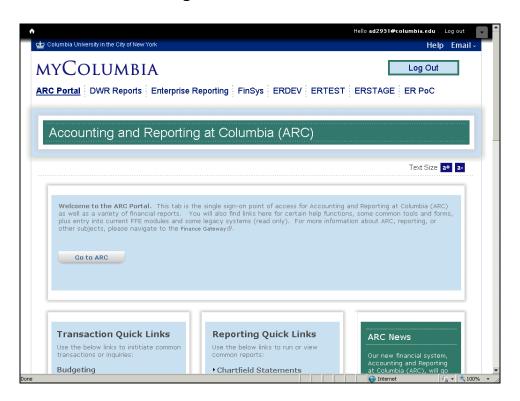


Step	Action
6.	Click the <b>Log in</b> button.
	Log in

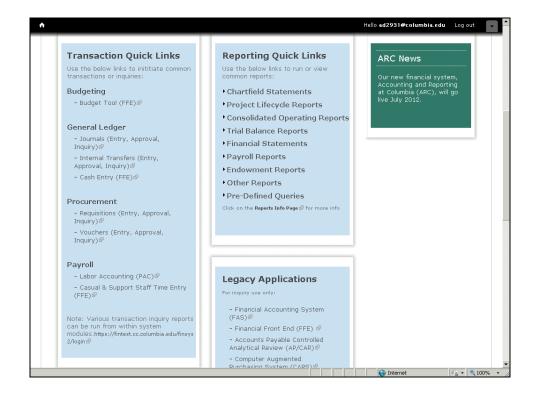


Step	Action
7.	Click the ARC Portal link.
	ARC Portal





8. Press the left mouse button over the scrollbar and drag the mouse to the desired location.





Step	Action
9.	You have successfully logged in to the ARC portal. You can now select the next topic, <i>Running the Balance Sheet Report</i> where you will learn how to run the Balance Sheet report from the ARC portal.  End of Procedure.



### Course References

Please find links to all of the Job Aids, Policies, and Procedures that were referenced throughout this course:

Job Aid: Getting Started with the Web-Based Training Tool Introduction to General Ledger in ARC Training Guide



### Check Your Understanding

1.	is the amount of cash a specific fund has provided to the University and
	therefore has a claim to.
2.	are the four key building blocks of Financial Statements.
3.	enables you to control commitments and expenditures automatically by
	checking them against predefined, authorized budgets.
4.	True or False: Edit Check makes sure ChartField combinations are valid.
5.	True or False: A journal can be routed for approval before it is edit and budget checked.

Answers to these questions can be found in the following topic.



### **Answer Key**

Below are the answers to the Check Your Understanding Questions:

- 1. <u>Claim on Cash</u> is the amount of cash a specific fund has provided to the University and therefore has a claim to.
- 2. <u>Ledgers, Accounting Period, ChartFields, and Debits and Credits</u> are the four key building blocks of Financial Statements.
- 3. <u>Budget Checking</u> enables you to control commitments and expenditures automatically by checking them against predefined, authorized budgets.
- 4. **True** or False: Edit Check makes sure ChartField combinations are valid.
- 5. True or **False**: A journal can be routed for approval before it is edit and budget checked.



### **Glossary**

**ARC** Accounting and Reporting at Columbia. Columbia University's new financial

system.

**Budget** Enables users to control commitments and expenditures automatically by

**Checking** checking them against predefined, authorized budgets.

**ChartFields** The fields that make Columbia's Chart of Accounts and provide it with an

overall structure. ARC has a total of eleven ChartFields which are recorded

on every transaction.

**FAS** Financial Accounting System - the University's existing accounting system

that will be replaced by the FIN ERP solution in July 2012.

**General Ledger** The 'Book of Record' which holds all financial transactions in detail or

summary and is used for financial reporting and financial management.

**InfoEd** A software that enables faculty, administrators and staff to move efficiently

through each part of the grant and contract process from proposal

development to post award management.

**Ledger Groups** Defines the processing rule for each budget ledger.

**Post** The process of balancing voucher accruals and payment entries. The voucher

and payment posting processes generate the appropriate accounting entries that will be passed to the General Ledger in the form of a journal during the

Journal Generation batch process.

**Project** First (highest) level at which you can budget and record project activity.