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CA&ES Dean's Office

CRU-Programmers

Project Manager: Alan Lai

Lead Programmer: Scott Kirkland

# Online Pre-Purchasing System

[Client: CRU]

[Contact: Pat Conners]

This document is a software requirement specification document for Online Pre-Purchasing System. It details all requirements, assumptions and use cases for the project.

## Introduction

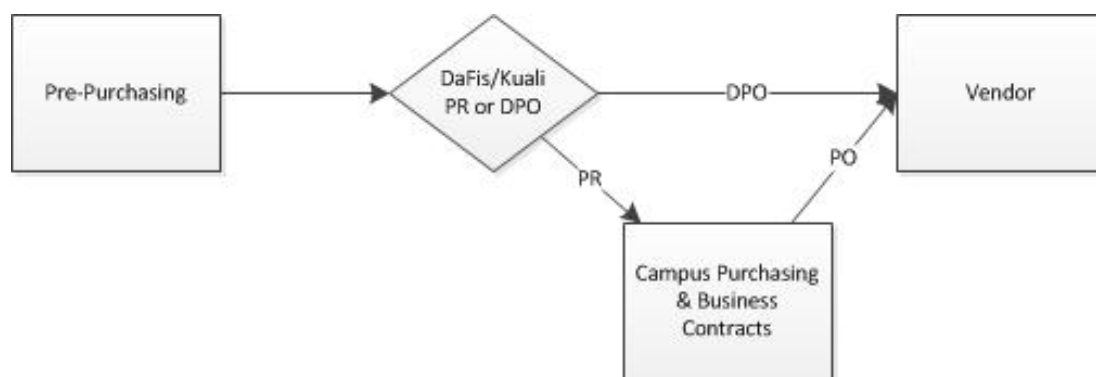
The University of California Davis does not have a standardized pre-purchasing process. Once orders are ready to be submitted and executed a process exists for all units across campus within the Davis Financial Information System (DaFIS) and in the new Kuali Financial System (KFS). Units across campus have various business practices and processes for performing pre-purchasing functions but there is no campus standard.

Several departments across campus have developed individual applications for pre-purchasing but there is not a wide spread adoption for these applications. In an attempt to streamline the process for all units at UC Davis, a committee has been assembled to develop an application for campus wide use. This application is expected to not only standardize the process of pre-purchasing but also bring this streamlined process for units that didn't previously have access to other prepurchasing applications.

## Scope

The scope of this project is to deliver an application that can handle the pre-purchasing process. The tool is expected to allow users to submit order requests, business agreement requests and repair order requests. This application will also aid in the departmental approval process associated with approving order requests. At the time of the development of this document complete integration with the campus financial systems is not possible, but is expected to be possible in the future.

This tool will only be expected to handle departmental review of orders and will not replace any approvals within the campus financial systems. Departmental approvals include supervisor and PI approval of an order. Account Managers provide review of orders to ensure reliable and accurate data so that purchasers are able to provide campus financial systems with more complete data. This system shall in no way replace any approvals required in KFS and approvals in this tool does not necessarily mean an order can be purchased. This tool is designed to aid departments in organizing purchasing information to eliminate duplication of data entry in the campus financial systems.



Pre-Purchasing system in context with DaFIS/Kuali

Upon completion of development and throughout the testing phase of this application the steering committee will have the option to submit major change requests to the application with the understanding that changes will be evaluated and a delay will be determined. Changes can affect the final delivery date and final production deployment. All changes must be submitted in a timely manner to allow for evaluation, development and validation before being released.

On final release to production changes to the application must be submitted and are subject to delay based on project team availability. Again changes after production must be submitted in a timely manner to allow for evaluation, development and validation. Major changes to the application can expect to take at a minimum of one month.

Features not specified in this document or submitted through the change request process are out of the scope of this project.

All mention of integration with Kualu is dependant upon the development of a programmatic interface with DaFIS/KFS.

## Development Timeline



Timeline of development including major milestones

The development of the application is expected to follow the above timeline. The first phase involves developing a set of requirements and specifications and getting approval from all stake holders (in this case the steering committee). The second phase will follow an iterative cycle meaning development will happen in stages with regular meetings with the stake holders to get feedback on progress. Once all features are implemented the application will be moved into a beta test phase for a minimum of one month and once all features have been validated and accepted by stake holders. At the completion of beta testing and once acceptance has been given from the committee the application will be moved into production with a slow rollout to departments.

The above timeline is an estimated schedule. It is subject to change based on changes to this requirements specification.

## Glossary

- Account Manager**- Person responsible for reviewing order requests and validating account information. *[Role]*
- Ad Hoc Account Managers**- Account Managers listed in Kualu but are not using this Prepurchasing app on a regular basis. An order may be placed against their account for which they must review before the order can be placed. *[Pre-Purchasing]*
- Approval Level**- Essentially the "order" in which approvals can take place. One or more person is required to give approval before order can advance to next level. *[Pre-Purchasing]*
- Approver**- Generally a PI (or can be other manger ex. IT Manager for IT purchases), user who provides an optional layer of department approval for purchase orders *[Role]*
- Business Agreement**- Object used for one-time or ongoing services based on an agreement or contract *[Pre-Purchasing / JMIE]*
- Business Agreement Request (BAR)**- A request to start a business agreement in this Pre-Purchasing System *[Pre-Purchasing]*
- Conditional Approval Scenario**- Extra layer of approval not common to the account/workgroup for special purchases. (Ex. Computer purchase must be approved by IT Manager) *[Pre-Purchasing]*
- Delegation Guidelines**- Rules for determining if a purchase should use a DPO or a PR *[Purchasing Decision Chart]*
- Department**- A organizational unit that cooresponds to a specific division/department/sub-department in DaFIS. A department can

contain one or more workgroups. *[Pre-Purchasing / JMIE]*

- Department Manager**- Person responsible for managing departments and workgroups. This is a purely administrative role. *[Role]*
- Department Purchase Order (DPO)**- Document initiated by a department according to delegation guidelines (refer to appended Purchasing Decision Chart) that is issued to a vendor to initiate a purchase
- Department Repair Order (DRO)**- Document initiated by a department to a vendor for repair services
- Kuali**- Financial system campus is migrating towards (KFS)
- Line Item**- Object used to denote an individual item in a purchase request (contains: quantity, url, catalog #, price ...) *[Pre-Purchasing]*
- Order Request (OR)**- A request to purchase some item(s) stored in this Pre-Purchasing System *[Pre-Purchasing]*
- Order Request Number (ORN)**- Number generated for each order request created in this system *[Pre-Purchasing]*
- Psfeed**- Purchasing data feeds currently available for DaFIS integration *[DaFIS]*
- Purchase Order (PO)**- Document that is issued by the institution (Campus Purchasing & Business Contracts) to a vendor to initiate a purchase
- Purchase Requisition (PR)**- Requisition by a department to have a Purchase Order (PO) created for a specific purpose.
- Purchaser**- Person responsible for entering purchase orders into DaFis/Kuali *[Role]*
- Repair Order Request (ROR)**- A request system to repair some item in this Pre-Purchasing. *[Pre-Purchasing]*
- Requester**- Person who initiates an Order Request *[Role]*
- Vendor**- Entity that a purchase is being made from
- Workgroup**- An organizational object that belongs to a department but does not require a distinct department to exist. Eg. A department may be broken up into multiple work units *[Pre-Purchasing]*

## Operating Environment

- Operating System:** Windows 2008R2 and above
- Required Software:** Sql Server 2008R2 and above, Internet Information Services 7 (IIS7), Asp.net 4.0 or above, Asp.net MVC3
- Languages:** C#, Javascript, T-SQL, Css, Html5
- Standards:** Section 508

## Requirements

### Automatic Approval

| Id  | Priority | Description  | Type |
|-----|----------|--|------|
| R79 | Medium   | Rule shall have an optional expiration date  | FC   |
| R63 | Medium   | Approvers shall have the option to set rules for automatic approval.                     | FC   |
| R64 | Medium   | Rule shall require a person or account for which order originates                        | FC   |
| R65 | Medium   | Rule shall require a dollar amount   | FC   |
| R66 | Medium   | Rule shall require the selection of less than or equal to a specified amount in dollars. | FC   |

|     |        |   |    |
|-----|--------|---|----|
| R77 | Medium | Automatic Approval rules shall be tied to a specific Approver | FC |
|-----|--------|---|----|

## Business Agreement

| Id  | Priority | Description  | Type |
|-----|----------|--|------|
| R51 | Medium   | Agreement types shall include "One-Time Service", "On-Going Agreement" and "No Cost Agreement" | FC   |
| R52 | Medium   | "No Cost Agreements" shall not have line items   | FC   |

## Data

| Id   | Priority | Description  | Type |
|------|----------|--|------|
| R82  | Medium   | Commodity Codes shall be downloaded from Kuali                                     | FC   |
| R83  | Medium   | Commodity Codes shall be organized into Group and SubGroups                        | FC   |
| R110 | Medium   | Workgroup shall require a primary department                                       | FC   |
| R1   | Medium   | Department information shall be loaded from Kauli                                  | FC   |
| R2   | Medium   | Department shall have a reference to its parent department unless it is at the top | FC   |
| R3   | Medium   | Accounts shall be associated with a department                                     | FC   |
| R4   | Medium   | Accounts shall be downloaded from Kuali  | FC   |
| R5   | Medium   | Accounts shall have account manager attached.                                      | FC   |
| R6   | Medium   | Accounts shall have a PI attached if available                                     | FC   |
| R23  | Medium   | Vendor lookup shall be available from the current list in Kuali                    | FC   |
| R24  | Medium   | Actions and purchase order events shall be tracked. (Ex. Approval)                 | FC   |

## Integration

| Id   | Priority | Description  | Type |
|------|----------|--|------|
| R74  | Medium   | Order Requests shall be uploaded to Kuali following guidelines                     | FC   |
| R88  | Medium   | Order Requests shall be converted to DPO in Kuali following delegation guidelines  | FC   |
| R89  | Medium   | Order Request shall be converted to PR in Kuali following delegation guidelines    | FC   |
| R90  | Medium   | Repair Order Request shall be converted to DRO in Kuali                            | FC   |
| R91  | Medium   | Business Agreement Request shall be convert to PR in Kuali                         | FC   |
| R93  | Medium   | Pre-Purchasing ORN shall be assigned to "Organization Document Number" in Kuali PO | FC   |
| R94  | Medium   | Commodity Codes shall be downloaded from Kuali                                     | FC   |
| R95  | Medium   | Commodity Codes shall be organized into groups and subgroups from Kuali            | FC   |
| R100 | Medium   | If possible, Orders shall be able to accept updates on status from Kuali           | FC   |

|      |        |  |    |
|------|--------|--|----|
| R111 | Medium | Orders shall be uploaded to Kualu and saved as an "unapproved requisition" | FC |
|------|--------|--|----|

## Notifications

| Id   | Priority | Description  | Type |
|------|----------|--|------|
| R97  | Medium   | Users shall be able to specify "away" status, such that orders will default to workgroup                                     | FC   |
| R98  | Medium   | "Away Status" shall require an expiration date   | FC   |
| R99  | Medium   | All roles shall have the option to send a fyi notification message manually for a specific order                             | FC   |
| R101 | Medium   | All roles shall have the option to receive emails immediately, daily summary or weekly summary                               | FC   |
| R102 | Medium   | All roles shall have the option to toggle certain notifications on/off (refer to appendix document, Notification Events)     | FC   |
| R103 | Medium   | All roles shall not have the option to toggle certain notifications on/off (refer to appendix document, Notification Events) | FC   |

## Orders

| Id   | Priority | Description  | Type |
|------|----------|--|------|
| R59  | Medium   | All users shall have the ability to assign an account that is not managed in the program (account would be populated from Kualu) | FC   |
| R104 | Medium   | All users shall be able to assign any account using lookup.  | FC   |
| R109 | Medium   | Orders shall require the selection of a department if workgroup is associated with more than one department.                     | FC   |
| R25  | Medium   | Orders shall require the selection of a workgroup if Requester is associated with more than one workgroup                        | FC   |
| R26  | Medium   | Requester shall have ability to duplicate previous order information for new a order   | FC   |
| R27  | Medium   | Requester shall have the option to create a new vendor   | FC   |
| R28  | Medium   | Requester shall have ability to look up vendors from Kualu lookup  | FC   |
| R29  | Medium   | Requester shall have the ability to select from common vendor list associated with workgroup                                     | FC   |
| R30  | Medium   | Requester shall have the option to select a delivery address from the associated list to the workgroup                           | FC   |
| R31  | Medium   | Requester shall have the option to create a new delivery address.  | FC   |
| R32  | Medium   | Requester shall select either an account or approver and account manager from select lists                                       | FC   |
| R36  | Medium   | Requester shall optionally specify shipping type (standard, express...)  | FC   |
| R38  | Medium   | If more than one account is specified, Requester shall specify amount (\$) or % for each account                                 | FC   |
| R39  | Medium   | Requester shall optionally select a "date needed"  | FC   |
| R40  | Medium   | Requester shall have option to specify if back ordering is acceptable  | FC   |

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|-----|--------|--|----|
| R41 | Medium | Requester shall have a field to make comments that are visible to all in approval chain.   | FC |
| R58 | Medium | Orders can have one or more approvers required at each level using conditional approval scenarios.   | FC |
| R81 | Medium | Orders with "yes" answered in a Conditional Approval Scenario question is subject to additional approvals  | FC |
| R44 | Medium | Requester shall have the option to attach one or more files to the order   | FC |
| R45 | Medium | Requester shall be required to specify one or more line items where applicable   | FC |
| R46 | Medium | Requester shall have the option to split entire purchase across accounts or split line items across accounts (for Purchase Order and Business Agreements only) | FC |
| R55 | Medium | Requester shall have ability to cancel order until purchaser processes order   | FC |
| R78 | Medium | Requester shall be able to specify a new estimated tax rate for the order.   | FC |
| R33 | Medium | List of accounts shall be limited to the accounts associated with the selected workgroup   | FC |
| R34 | Medium | List of Approvers shall be limited by selected workgroup   | FC |
| R35 | Medium | List of Account Managers shall be limited by selected workgroup.   | FC |
| R37 | Medium | Order shall accept one or more accounts  | FC |
| R47 | Medium | Line items shall have the option to split across accounts by \$ amount or percent.   | FC |
| R48 | Medium | Line items shall require a quantity, item #, description, unit type and unit price   | FC |
| R49 | Medium | Line items shall have the optional fields of url and notes   | FC |
| R50 | Medium | System shall calculate an estimated tax value using base 8.25% rate  | FC |
| R53 | Medium | Approver shall have ability to edit order  | FC |
| R72 | Medium | Approvers shall have a comment box to add comments to an order   | FC |
| R54 | Medium | Account Manager shall have the option to edit order.   | FC |
| R56 | Medium | Order shall default to 2 (without approver) or 3 (with approver) levels of approval.   | FC |
| R60 | Medium | Account number shall be required before an Account Manager can approve order   | FC |
| R73 | Medium | Account Managers shall have a comment box to make comments to order  | FC |
| R68 | Medium | Account Managers approving order ad hoc shall not be allowed to edit orders  | FC |
| R69 | Medium | Account Managers approving orders ad hoc shall be allowed to make comments   | FC |
| R70 | Medium | Account Managers approving orders ad hoc shall be able to approve or deny their portion of the order   | FC |
| R71 | Medium | Split orders with split approvals shall have a disclaimer stating approval only approves part of the order   | FC |

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|------|--------|---|----|
| R92  | Medium | Purchaser shall be able to edit order   | FC |
| R84  | Medium | Order shall require a commodity code  | FC |
| R85  | Medium | Commodity code shall be assigned by Purchaser   | FC |
| R96  | Medium | Purchaser shall assign commodity codes by line item   | FC |
| R107 | Medium | Account Manager or Purchaser can complete an order with a reason (Ex. P. Card purchases)                                | FC |
| R43  | Medium | If conditional approval specified for selected workgroup or dept, Requester will be required to answer yes/no question. | FC |

## Security

| Id   | Priority | Description  | Type |
|------|----------|--|------|
| R67  | Medium   | All users of the system shall be authenticated by CAS or Shiboleth | NF   |
| R108 | Medium   | Ad hoc Account Managers shall be authorized from Kuali web service | FC   |

## Workgroups

| Id  | Priority | Description  | Type |
|-----|----------|--|------|
| R12 | Medium   | Account shall be able to override Approver(s) for workgroup  | FC   |
| R86 | Medium   | Multiple Approvers by Account shall be assigned specifically to an Account per workgroup   | FC   |
| R87 | Medium   | Conditional Approvals shall be able to inherit from a department   | FC   |
| R8  | Medium   | Each workgroup shall have one or more Requesters   | FC   |
| R22 | Medium   | Department administrators shall be able to manage Requesters, accounts, vendors, addresses, Purchasers, Account Managers and Approvers in the department's workgroups. | FC   |
| R7  | Medium   | Each workgroup shall be associated with one or more department(s)  | FC   |
| R9  | Medium   | Each workgroup shall have one or more accounts associated  | FC   |
| R10 | Medium   | Account's account manager shall be added to workgroup's account managers list, unless otherwise specified  | FC   |
| R11 | Medium   | Account shall be able to override account manager for workgroup  | FC   |
| R13 | Medium   | Account manager for workgroup shall have account manager access for all accounts in workgroup  | FC   |
| R14 | Medium   | Approver for workgroup shall have account approver access for all accounts in workgroup  | FC   |
| R15 | Medium   | Workgroup shall have one or more account managers  | FC   |
| R16 | Medium   | Workgroup shall have one or more approvers   | FC   |
| R17 | Medium   | Workgroup shall have one or more purchasers  | FC   |
| R18 | Medium   | Workgroup shall have a list of commonly used vendors associated  | FC   |
| R19 | Medium   | Workgroup shall have a common list of addresses associated   | FC   |
| R20 | Medium   | All purchase orders shall be associated with a workgroup.  | FC   |



|     |        |  |    |
|-----|--------|--|----|
| R21 | Medium | Departments shall have administrators to manage workgroups                             | FC |
| R42 | Medium | Workgroup shall optionally have conditional approval scenarios                         | FC |
| R80 | Medium | Conditional Approval Scenario shall require a question with an answer of "yes" or "no" | FC |

## Use Cases

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### Automatic Approval

#### Approver Creates Automatic Approval Rule (U12)

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##### Description

An Approver creates rules for automatic approval for orders that they do not wish to approve individually. These types of orders could be orders from specific people where less than a certain amount that will always be approved, but would ignore larger orders that need to be individually approved.

##### Roles

Approver

##### Preconditions

- User is listed as an Approver on one or more workgroup(s)

##### Postconditions

- New rule is created

##### Steps

1. User logs in to application
2. User selects to view automatic approvals
3. User selects to create new automatic approval rule
4. User selects either an account or a person listed from workgroups the user is an Approver for
5. User selects comparison operator ( \$ amount equal to (=) or less than (<))
6. User specifies the \$ amount to compare order against
7. User confirms automatic approval rule

### Business Agreement

#### Business Agreement Initiated (U13)

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##### Description

A Requester puts in a new business agreement.

##### Roles

Requester

##### Preconditions

- Requester has been assigned to a workgroup
- Workgroup has one or more accounts
- Workgroup has one or more Account Managers

##### Postconditions

- Business Agreement is initiated
- Business Agreement has approval routing assigned
- Requester receives confirmation of Business Agreement submission

## Steps

1. Users logs in to the application
2. User selects to create a Business Agreement
3. User selects a workgroup, if user is a part of more than one\*
4. User selects an agreement type
5. User enters agreement contact information (name, phone)
6. User selects a vendor from drop down of vendors saved in workgroup
7. User searches list of vendors of Kuali\*
8. User selects a vendor, then an address from Kuali list\*
9. User enters UCD Contact information (name, phone)
10. User enters effective dates
11. User selects a delivery address from list of addresses saved in workgroup
12. User creates new address, if desired address not in list\*
13. If user specified "One-Time Service" or "On-Going Agreement", user enters line item information
14. User selects account or approver(s)/account manager, not both
15. If user specifies more than one account, user defines how much to charge against each account (either by \$ or %)\*
16. If use splits by line item, each line item needs to have split amount defined\*
17. User selects shipping type
18. User specifies a "date needed by" using a date control\*
19. User specifies if it is acceptable to backorder item (to be answered using radio buttons yes/no answer)
20. User answers question about order defined by special routing scenario\*
21. User makes comments\*
22. User attaches file(s) to purchase order\*
23. User submits business agreement order

## Orders

### Requester Edits Order (U2)

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#### Description

A Requester has already submitted an order and would like to make changes.

#### Roles

Requester

#### Preconditions

- Requester has submitted an order.
- Order has not been approved by any level of approver.

#### Postconditions

- Order is updated with new information.

## Steps

1. User logs in to the application
2. User clicks to view orders

3. User selects order
4. User changes information
5. User submits updated Purchase order

### **Requester Cancels Order (U3)**

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#### **Description**

A Requester has already submitted an order and now wants to cancel the order.

#### **Roles**

Requester

#### **Preconditions**

- Requester has submitted an order.
- Order has not been processed by Purchaser.

#### **Postconditions**

- Order is cancelled.

#### **Steps**

1. User logs in to the application
2. User clicks to view orders
3. User selects order
4. User selects cancel button/option.
5. User adds comment for canceling order\*
6. User is redirected to list of orders page

### **Approver Reviews Order (U4)**

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#### **Description**

An order has been placed and is at the stage for an Approver to review the order. The list of orders is determined by workgroups, the Approver is an Approver for orders that specified a specific person to be the Approver. This also applies to anyone who must approve an order (such as through the Conditional Approval Scenarios), but does not apply to Account Managers. This use case also does not apply to orders that may meet Automatic Approval Rules.

#### **Roles**

Approver/PI

#### **Preconditions**

- Order placed in workgroup or account for which user is a defined Approver for or user was explicitly specified as the Approver
- Order has not been approved by an Approver

#### **Postconditions**

- Order has been approved for Approver level
- Order either advanced to next level of approval or pending for another Approver at same level.
- Tracking for Approver's action is added to order

#### **Steps**

1. User logs in to application

2. User views list of orders pending approval for workgroups or for which user was explicitly defined as the approver
3. User selects an order to approve
4. User makes changes to order\*
5. User makes comments\*
6. User sends a FYI message\*
7. User makes decision on order (Approve/Deny)

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### Account Manager Reviews Order (U5)

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#### Description

An order has been approved by all levels necessary below the account manager. The Account Manager approval level is the final level before the purchaser.

#### Roles

Account Manager

#### Preconditions

- Order has been approved for levels below Account Manager
- User was either specified on the order as Account Manager or is defined as an Account Manager on the workgroup or account associated with the order.

#### Postconditions

- Order is completed with Account Manager approval level.
- Tracking information is added to Order about Account Manager action.
- Account(s) are specified for order

#### Steps

1. User logs in to application
2. User views list of orders pending Account Manager approval for workgroup or has been specified as Account Manager of order
3. User selects order to review
4. User makes changes to order\*
5. User specifies accounts for order if none are specified\*
6. User makes comments\*
7. User sends a FYI message\*
8. User makes decision on order (Approve/Deny)

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### Purchaser Reviews Order (U6)

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#### Description

This use case describes what a Purchaser will do after an order has been approved by an Account Manager

#### Roles

Purchaser

#### Preconditions

- Order has been approved by Account Manager

#### Postconditions

- Order is marked as Purchased
- Tracking information for Purchaser action is recorded

### Steps

1. User logs in to application
2. User views orders that are pending Purchaser processing either by workgroup or user has been defined specifically by account
3. User selects order
4. User modifies order information\*
5. User submits order to Kuali (either by hand of programmatic interface, depending on availability)
6. User sends a FYI message\*
7. User marks order as "purchased"
8. User specifies reason for complete if not uploading to Kuali\*

## Approval for User outside of System (U15)

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### Description

This situation occurs when an order is split to use multiple accounts, but one or more of the accounts belongs to a department that is not using this Prepurchasing system. The Account Manager for the account must log in to this Prepurchasing system to approve an order before the Purchaser can proceed.

### Roles

Account Manager/Fiscal Officer tied to Kuali Account

### Preconditions

- Order has been approved up to the Account Manager(s)
- Account belonging to department not using Prepurchasing has been added to order
- User is listed as Account Manager in Kuali for specified account
- User is a kerberos authenticated user
- User is not associated with any workgroup in Prepurchasing

### Postconditions

- Order is approved for account
- Tracking information is added to Order about Account Manager action.

### Steps

1. Order is modified to include new account (not used in Prepurchasing) by Account Manager in Prepurchasing
2. User is notified using Kuali inbox (assuming access to interface, otherwise email)
3. User logs in to Kuali and reads inbox message.
4. User follows link into Prepurchasing
5. User authenticates to CAS
6. User views order
7. User makes comments\*
8. User makes decision (approved/denied)

## Purchase Orders

### Purchase Order Initiated (U1)

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**Description**

A Requester puts in a order request.

**Roles**

Requester

**Preconditions**

- Requester has been assigned to a workgroup
- Workgroup has one or more accounts
- Workgroup has one or more Account Managers

**Postconditions**

- Purchase order is initiated
- Purchase Order has approval routing assigned
- Requester receives confirmation of Purchase Order submission

**Steps**

1. User logs in to the application
2. User selects to create a Purchase Order
3. User selects a workgroup, if user is a part of more than one\*
4. User selects a vendor from drop down of vendors saved in workgroup
5. User searches list of vendors of Kuali\*
6. User selects a vendor, then an address from Kuali list\*
7. User selects a delivery address from list of addresses saved in workgroup
8. User creates new address, if desired address not in list\*
9. User enters line item information
10. User selects account or approver(s)/account manager, not both
11. If user specifies more than one account, user defines how much to charge against each account (either by \$ or %)\*
12. If user splits by line item, each line item needs to have split amount defined\*
13. User selects shipping type\*
14. User specifies a "date needed by" using a date control\*
15. User specifies if it is acceptable to backorder item (to be answered using radio buttons yes/no answer)
16. User answers question about order defined by special routing scenario\*
17. User makes comments\*
18. User attaches file(s) to purchase order\*
19. User submits purchase order

## Repair Order (DRO)

**Department Repair Order Initiated (U14)**

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**Description**

A Requester puts in a new Repair Order.

**Roles**

Requester

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**Preconditions**

- Requester has been assigned to a workgroup
- Workgroup has one or more accounts
- Workgroup has one or more Account Managers

**Postconditions**

- Department Repair Order is initiated
- Department Repair Order has approval routing assigned
- Requester receives confirmation of Department Repair Order submission

**Steps**

1. User logs in to the application
2. User selects to create a new Department Repair Order
3. User selects a workgroup, if user is a part of more than one\*
4. User selects a vendor from drop down of vendors saved in workgroup
5. User searches list of vendors in Kuali\*
6. User selects a vendor, then an address from Kuali list\*
7. User selects a repair location address from list of addresses saved in workgroup
8. User creates new address, if desired address not in list\*
9. User enters line item information (description, estimated item value, repair description, \$ for repair)
10. User selects account or approver(s)/account manager, not both
11. If user specifies more than one account, user defines how much to charge against each account (either by \$ or %)\*
12. If use splits by line item, each line item needs to have split amount defined\*
13. User makes comments\*
14. User attaches file(s) to repair order\*
15. User submits repair order

## Workgroups

**Create New Workgroup (U7)**

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**Description**

This describes the situation where a Department Manager is setting up workgroups and needs to create a new workgroup.

**Roles**

Department Admin

**Preconditions**

- Department Manager is assigned to one or more departments

**Postconditions**

- Workgroup is created
- 1 or more accounts is added to workgroup
- 1 or more users are added to workgroup

**Steps**

1. User logs in to application



2. User selects to view list of workgroups
3. User selects to "Create New" workgroup
4. User selects a department to assign workgroup
5. User enters name of workgroup
6. User adds 1 or more account(s)
7. User has the option to define specific approver, account manager and purchaser to account\*
8. User adds 0 or more Approvers to workgroup\*
9. User adds 0 or more Account Managers\*
10. User adds 0 or more Purchasers\*
11. User adds 0 or more Vendors\*
12. User adds 0 or more Addresses\*
13. User adds 1 or more Users
14. User selects to save workgroup

---

### Edit Workgroup Accounts (U8)

---

#### Description

This describes the situation where a workgroup needs to have an account added or removed

#### Roles

Department Manager

#### Preconditions

- User is Department Manager for one or more departments
- User manages a department with at least one workgroup

#### Postconditions

- Workgroup's accounts are updated
- Workgroup has 1 or more accounts

#### Steps

1. User logs in to application
2. User selects to view list of workgroups
3. User selects a workgroup to edit
4. User removes account from workgroup\*
5. Repeat step 4 to delete another or proceed to step 8 to finish\*
6. User selects to add a new account\*
7. User selects account from list of accounts by department\*
8. User confirms account\*
9. Repeat steps 6-8 to add another account\*
10. User saves changes to workgroup

---

### Edit Workgroup People (U9)

---

#### Description

This describes the situation to edit a workgroup's Approvers, Account Managers or Purchasers

---

**Roles**

Department Manager

**Preconditions**

- Department Manager is assigned to one or more departments
- Department Manager manages a department with one or more workgroups

**Postconditions**

- Workgroup has people updated

**Steps**

1. User logs in to application
2. User selects to view list of workgroups
3. User selects workgroup to edit
4. User selects to delete either a Approver/Account Manager/Purchaser from workgroup\*
5. User selects to add either an Approver/Account Manager/Purchaser\*
6. User searches for user by kerberos id or email address\*
7. Application resolves user information using ldap lookup against campus directory\*
8. User edits information if incorrect\*
9. User confirms information for new person\*
10. Repeat either step 4 or 5-8 for additional people\*
11. User confirms changes to workgroup

**Edit Workgroup Vendors (U10)**

---

**Description**

This describes the scenario for editing the list of vendors associated with a workgroup

**Roles**

Department Manager

**Preconditions**

- Department Manager is assigned to one or more departments
- Department Manager manages a department with one or more workgroups

**Postconditions**

- Workgroup's list of vendors is updated

**Steps**

1. User logs in to application
2. User selects to view list of workgroups
3. User selects a workgroup to edit
4. User selects to delete a Vendor from the workgroup\*
5. User selects to add a Vendor to the workgroup\*
6. User either enters information for a new Vendor by hand or selects from list of Kuali (steps 7-9)\*
7. User searches for Vendor using search box, list of available vendors is returned from information from Kuali\*
8. User selects Vendor from list\*
9. User selects address for Vendor from list after Vendor is selected\*

10. User confirms vendor information\*
11. Repeat either steps 6 or 7-9 then 10 to add a new Vendor to workgroup\*
12. User confirms changes to workgroup

### Create Conditional Approval Scenario (U11)

---

#### Description

Department Manager adds conditional routing scenario to a workgroup to add extra layers of approval for certain purchases.

#### Roles

Department Manager

#### Preconditions

- Department Manager manages one or more departments
- Department Manager manages a department with one or more workgroups

#### Postconditions

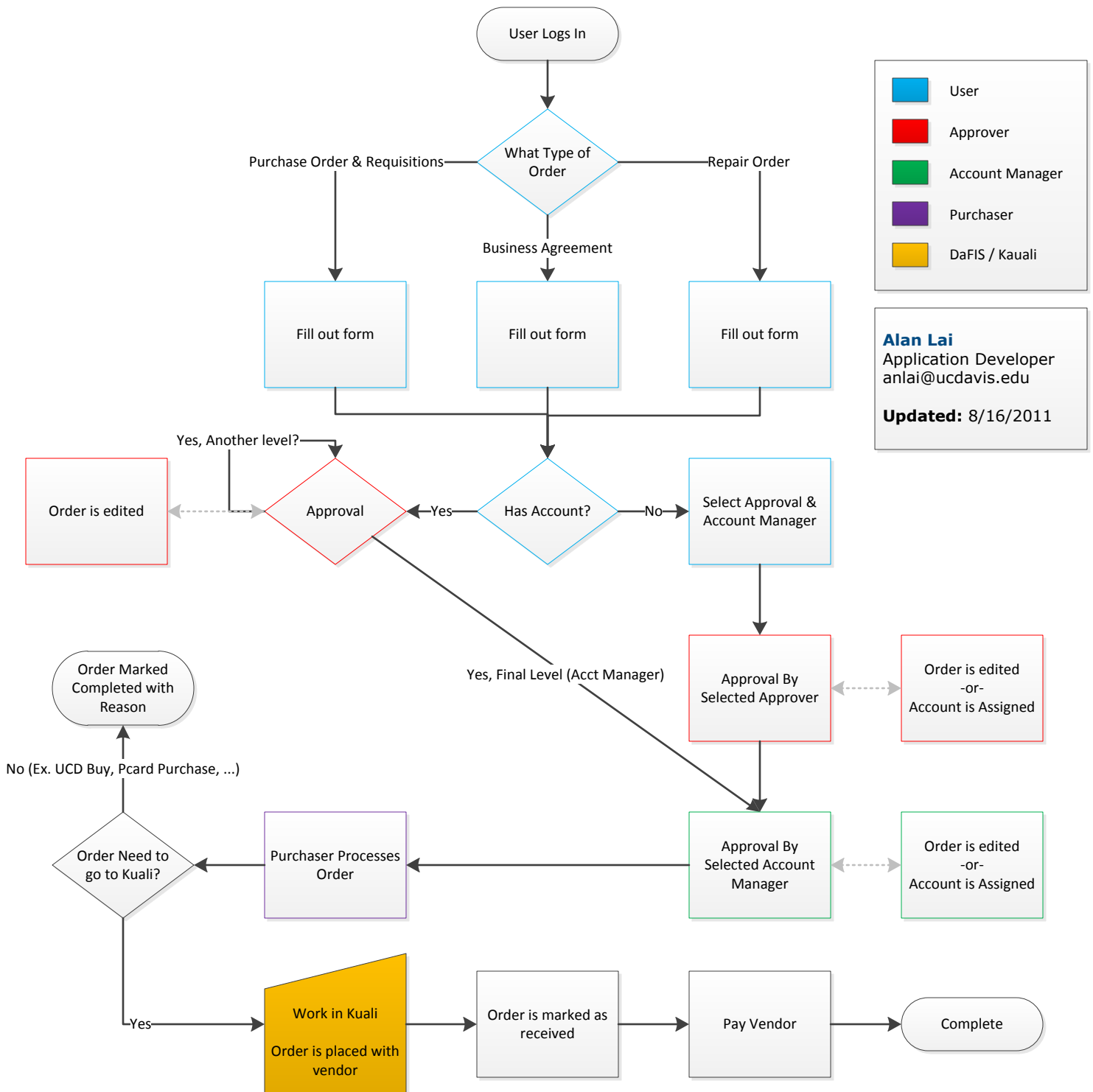
- Workgroup has new conditional approval scenario defined

#### Steps

1. User logs in to application
2. User selects to view a list of workgroups
3. User selects a workgroup to edit
4. User selects to delete a conditional approval scenario\*
5. Repeat step 4 to delete another conditional approval scenario\*
6. User selects to add a new conditional approval scenario\*
7. User defines question to be asked to user/approver/account manager\*
8. User defines one or more people that are required to approve order\*
9. Repeat steps 6-8 to add another conditional approval scenario\*
10. User confirms changes to workgroup

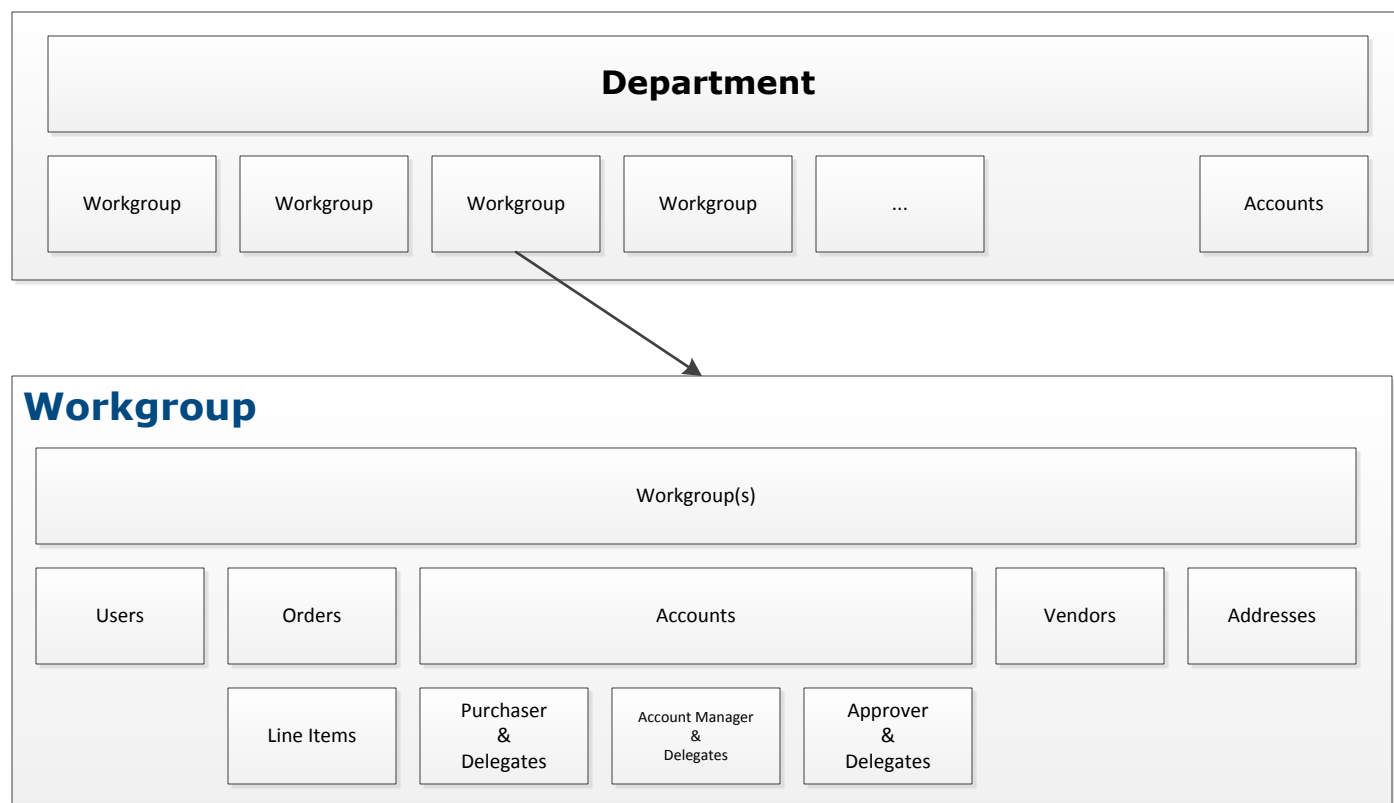
# UC Davis Pre-Purchasing Workflow

College of Agricultural & Environmental Sciences Dean's Office  
Computing Resources Unit



# UC Davis Pre-Purchasing Data Hierarchy

College of Agricultural & Environmental Sciences Dean's Office  
Computing Resources Unit



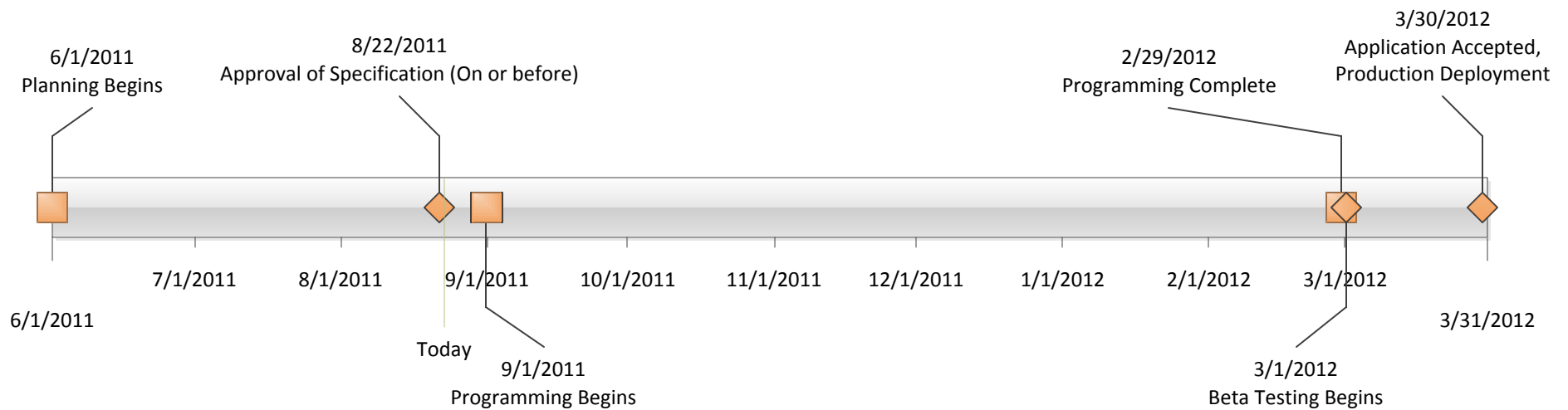
## Alan Lai

Application Developer  
anlai@ucdavis.edu

**Created:** 7/14/2011

# UC Davis Pre-Purchasing Timeline

College of Agricultural & Environmental Sciences Dean's Office  
Computing Resources Unit



# Excluded Items List

The following items must be processed on a DaFIS Requisition (PR) through the Contracting Services, regardless of cost:

- Building Repairs, Products, Services, or Modifications
- Animals; laboratory or others
- Catering and food-related agreements
- Charters - air, land or sea
- Computer software that requires license agreements to be signed (does not include registration cards)
- Consultant Services or Independent Contractors
- Electrical supplies and equipment restricted per P&P [290-85](#)
- Employee as Vendor Transactions
- Equipment Maintenance Contracts
- Equipment Rentals in excess of 31 days
- Food Equipment
- Furniture, unless:
  - ordered in UCD Buy
  - ordered through the campus Furniture Program
  - office furniture \$500 and below
- Inventorial equipment
- On-site labor-related services of any kind
- Personnel Type services
- Precious Metals
- Real property rentals of facilities, storage space, etc.
- Respiratory Protection Items
- Services or materials that are available at a lower total cost through a UCD service (e.g., Repro Graphics, Central Storehouse)
- Specially controlled items, such as ethyl alcohol (except as purchased from the Central Storehouse or other UCD Buy vendor), narcotics or dangerous drugs, Radioactive Nickel Foils and Sealed Sources
- Weapons (guns, rifles, etc.)
- All products requiring special conditions routing in DaFIS (i.e. to EH&S, Facilities, etc.)

## Purchasing Decision Chart

| ORDER TYPE   | DESCRIPTION   | COST LIMITS*               | METHOD(S) USED  | ORDER PLACED BY | POLICY                 |
|--|---|----------------------------|---|-----------------|------------------------|
| Low-value Purchases (<\$4999*)<br>Open Vendor (OV) | Orders of supply items up to the departmental delegation level (\$4,999*); <a href="#">Excluded Items</a> not allowed | \$4,999 per vendor per day | <ul style="list-style-type: none"> <li>Departmental Purchase Order (<a href="#">DPO</a>)</li> <li><a href="#">Purchasing Card</a></li> <li><a href="#">UCD Buy</a></li> </ul> | Department      | <a href="#">350-21</a> |
| Non-delegated Purchases                            | Supplies orders totaling over \$4,999*; all equipment items, services, and <a href="#">Excluded Items</a>             | None                       | 1. Department initiates a Requisition ( <a href="#">PR</a> )<br>2. Purchasing creates a Purchase Order/Business Agreement (PO) from the PR                                    | Purchasing      | <a href="#">350-25</a> |
| Repair Orders (RO)                                 | Repairs of equipment or supplies, not otherwise available through UCD services or established maintenance agreements  | \$4,999 per vendor per day | Departmental Repair Order ( <a href="#">DRO</a> )   | Department      | <a href="#">350-21</a> |
| University Agreements (D3, M3)                     | Negotiated agreements for systemwide, campuswide, or departmental use. Items may be supply or service                 | Specific to each agreement | <ul style="list-style-type: none"> <li>Departmental Purchase Order (<a href="#">DPO</a>) referencing the agreement number</li> <li><a href="#">UCD Buy</a></li> </ul>         | Department      |                        |
| Published Materials (U3)                           | Published and copyrighted materials, including periodicals and electronic media.                                      | None                       | <ul style="list-style-type: none"> <li>Departmental Purchase Order (DPO)</li> <li><a href="#">Purchasing Card</a></li> </ul>  | Department      | <a href="#">350-21</a> |

\* Total price including tax and freight/shipping/handling charges.

Payments: With the exception of purchases made in UCD Buy or on a Purchasing Card, payments on the above purchase types are made on a DaFIS [AP Vendor Invoice](#) (VI) document.



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**Requester Notification Events**

|                                       | <b>Always On</b> | <b>User<br/>Selectable</b> | <b>Not<br/>Needed</b> | <b>Response<br/>Count</b> |
|---------------------------------------|------------------|----------------------------|-----------------------|---------------------------|
| Order Submission                      | 54.5% (6)        | 36.4% (4)                  | 9.1% (1)              | 11                        |
| Approver Approved                     | 36.4% (4)        | 54.5% (6)                  | 9.1% (1)              | 11                        |
| Approver Denied                       | 90.9% (10)       | 9.1% (1)                   | 0.0% (0)              | 11                        |
| Approver Change                       | 36.4% (4)        | 63.6% (7)                  | 0.0% (0)              | 11                        |
| Account Manager Approved              | 18.2% (2)        | 72.7% (8)                  | 9.1% (1)              | 11                        |
| Account Manager Denied                | 81.8% (9)        | 18.2% (2)                  | 0.0% (0)              | 11                        |
| Account Manager Change                | 27.3% (3)        | 72.7% (8)                  | 0.0% (0)              | 11                        |
| Purchaser Action (Process into Kuali) | 27.3% (3)        | 63.6% (7)                  | 9.1% (1)              | 11                        |
| Purchaser Change                      | 45.5% (5)        | 54.5% (6)                  | 0.0% (0)              | 11                        |
| Order Processed in Kuali              | 9.1% (1)         | 72.7% (8)                  | 18.2% (2)             | 11                        |
| Order Approved in Kuali               | 18.2% (2)        | 63.6% (7)                  | 18.2% (2)             | 11                        |
| Order Received                        | 70.0% (7)        | 30.0% (3)                  | 0.0% (0)              | 10                        |
| Order Cancelled by User               | 72.7% (8)        | 18.2% (2)                  | 9.1% (1)              | 11                        |
| Order Cancelled by Approver           | 81.8% (9)        | 18.2% (2)                  | 0.0% (0)              | 11                        |
| Order Cancelled by Account Manager    | 90.9% (10)       | 9.1% (1)                   | 0.0% (0)              | 11                        |
| Order Cancelled by Purchaser          | 90.9% (10)       | 9.1% (1)                   | 0.0% (0)              | 11                        |

**Approver Notification Events**

|                                 | <b>Always On</b> | <b>User<br/>Selectable</b> | <b>Not<br/>Needed</b> | <b>Response<br/>Count</b> |
|---------------------------------|------------------|----------------------------|-----------------------|---------------------------|
| Order Approved by Acct. Manager | 0.0% (0)         | 90.0% (9)                  | 10.0% (1)             | 10                        |
| Order Denied by Acct. Manager   | 60.0% (6)        | 30.0% (3)                  | 10.0% (1)             | 10                        |
| Order Processed by Purchaser    | 20.0% (2)        | 60.0% (6)                  | 20.0% (2)             | 10                        |
| Order Approved in Kuali         | 10.0% (1)        | 80.0% (8)                  | 10.0% (1)             | 10                        |
| Order Received/Completed        | 20.0% (2)        | 70.0% (7)                  | 10.0% (1)             | 10                        |

**Account Manager Notification Events**

|                              | <b>Always On</b> | <b>User<br/>Selectable</b> | <b>Not<br/>Needed</b> | <b>Response<br/>Count</b> |
|------------------------------|------------------|----------------------------|-----------------------|---------------------------|
| Order Processed by Purchaser | 20.0% (2)        | 80.0% (8)                  | 0.0% (0)              | 10                        |
| Order Approved in Kuali      | 20.0% (2)        | 80.0% (8)                  | 0.0% (0)              | 10                        |
| Order Received               | 30.0% (3)        | 70.0% (7)                  | 0.0% (0)              | 10                        |

**Purchaser Notification Events**

|                         | <b>Always On</b> | <b>User<br/>Selectable</b> | <b>Not<br/>Needed</b> | <b>Response<br/>Count</b> |
|-------------------------|------------------|----------------------------|-----------------------|---------------------------|
| Order Approved in Kuali | 18.2% (2)        | 81.8% (9)                  | 0.0% (0)              | 11                        |
| Order Received          | 63.6% (7)        | 36.4% (4)                  | 0.0% (0)              | 11                        |

# Pre-Purchasing Kuali Integration Interface

|                     |  |
|---------------------|--|
| <b>Action:</b>      | Validate Fiscal Officer  |
| <b>Description:</b> | PrePurchasing needs to validate users who do not use the application daily for order request validation. Rather than keeping a list of all Fiscal Officers this web service call will be used to validate access to review orders. |
| <b>Inputs:</b>      | <ul style="list-style-type: none"> <li>Account Chart Code</li> <li>Account Number</li> </ul>   |
| <b>Outputs:</b>     | <ul style="list-style-type: none"> <li>Login Id of Fiscal Officer</li> </ul>   |

|                     |  |
|---------------------|--|
| <b>Action:</b>      | Upload Order Request / Agreement / Repair Order Request  |
| <b>Description:</b> | PrePurchasing will upload information from an Order Request document into Kuali which will be saved as an <b>unapproved</b> requisition.   |
| <b>Inputs:</b>      | <ul style="list-style-type: none"> <li>Requestor (Login Id of person requesting order)</li> <li>Initiator (Login Id of Purchaser entering order)</li> <li>Request Type (Specific, Agreement, DPO, DRO, etc.) Code?</li> <li>Description of Order</li> <li>Delivery Address <ul style="list-style-type: none"> <li>Name</li> <li>Address Line 1/2/3</li> <li>City</li> <li>State</li> <li>Zip</li> <li>Country</li> </ul> </li> <li>Item Details <ul style="list-style-type: none"> <li>Unit of Measure</li> <li>Description</li> <li>Price</li> <li>Quantity</li> <li>Commodity Code</li> </ul> </li> <li>Freight or Shipping and Handling Amount</li> <li>Accounting Details <ul style="list-style-type: none"> <li>Chart</li> <li>Account</li> <li>Sub-Account (Optional)</li> <li>Project (Optional)</li> </ul> </li> <li>Data as required by PSFEED</li> <li>Vendor Information <ul style="list-style-type: none"> <li>Vendor Id and Address #</li> <li>- or -</li> <li>Suggested Vendor Name</li> </ul> </li> <li>PrePurchasing Order Request Number as Reference Number</li> </ul> |
| <b>Outputs:</b>     | <ul style="list-style-type: none"> <li>Document Id #</li> <li>Message <ul style="list-style-type: none"> <li>Severity (INFO/WARNING/ERROR)</li> </ul> </li> </ul>  |

|  |  |
|--|--|
|  | <ul style="list-style-type: none"> <li>○ Message Code</li> <li>○ Message Text</li> </ul> |
|--|--|

|                     |  |
|---------------------|--|
| <b>Action:</b>      | Update Order Information and Events  |
| <b>Description:</b> | PrePurchasing will be given a view to update requests on their status. Queries will be executed directly against a database view.  |
| <b>Inputs:</b>      | <ul style="list-style-type: none"> <li>• Document Id # (Generated from Kuali)</li> </ul>   |
| <b>Outputs:</b>     | <ul style="list-style-type: none"> <li>• Approval Status' <ul style="list-style-type: none"> <li>○ Account Manager Approval</li> <li>○ Full Approval</li> <li>○ PO Issued</li> <li>○ Paid, partial would be false until full amount is paid</li> <li>○ Received, Entire order is received</li> <li>○ PO Number (after all approvals complete)</li> </ul> </li> </ul> |

|                     |  |
|---------------------|--|
| <b>Action:</b>      | Mark Order Received  |
| <b>Description:</b> | PrePurchasing will not be responsible for handling receiving information because it is the responsibility of KFS. PrePurchasing shall be given a link from KFS that will allow users of the PrePurchasing system into a view in KFS to mark an order complete. |
| <b>Inputs:</b>      | <ul style="list-style-type: none"> <li>• Link to Receipt Document, using PO#</li> </ul>  |
| <b>Outputs:</b>     | <ul style="list-style-type: none"> <li>• n/a</li> </ul>  |

|                     |  |
|---------------------|--|
| <b>Action:</b>      | Validation Table Information from DS or FIS  |
| <b>Description:</b> | PrePurchasing will be using validated lookup information from DS or FIS to aid with the data entry on in PrePurchasing. The following is information expected to be downloaded and stored locally to validate input. |
| <b>Inputs:</b>      | <ul style="list-style-type: none"> <li>• n/a</li> </ul>  |
| <b>Outputs:</b>     | <ul style="list-style-type: none"> <li>• Accounting Fields</li> <li>• Account Manager</li> <li>• Commodity Code</li> <li>• Vendor ID</li> <li>• Vendor Addresses</li> </ul>  |