

## Appendix 1 - ILS Survey



## VALE-OLS ILS Analysis

11 May, 2006

- 36 institutions completed the survey at <http://euphrates.wpunj.edu/faculty/WagnerK/VALE-OLS/>
- ILS vendor breakdown:
  - 9 Endeavor/ExLibris
  - 3 Innovative Interfaces
  - 21 SirsiDynix
  - 2 The Library Corporation
  - 1 Polaris
- Current ILS installation years range from 1986 to 2005
- 35 institutions report that they perform regular updates of their software
- 22 institutions report that they are on the latest release of their ILS
- Module utilization
  - 36 OPAC
  - 34 Cataloging
  - 35 Circulation
  - 26 Periodicals/Serials
  - 22 Acquisitions
  - 22 Academic Reserves
  - 21 Z39.50
  - 9 Other
  - 8 Material/Equipment Booking
  - 7 Open URL
  - 6 Federated Search
  - 5 Fiscal Control
  - 5 ILL
  - 4 Authority Control
  - 3 ERC
  - 3 Self Check-out
- Other, non ILS-tied, modules
  - Link resolvers
  - Request, Director's Station, LINCPlus, SmartPort
  - PocketCirc PDA Inventory
  - Remote patron authentication
  - Intracampus loans
  - Reports module
- Server management
  - 20 At the library, by library staff
  - 9 Out of the library, by others
  - 7 Other
    - With IT staff assistance
    - Out of the library but by library staff
    - By the county public library
    - The server OS is maintained by IT outside of the library, but the ILS software is maintained by the Library
- Server platform/OS

- 21 UNIX
- 11 Windows
- 1 Sun Solaris
- 1 VMS
- Support/Administration
  - 2 – more than 5
  - 1 - 4
  - 1 - 3.5
  - 4 – 3
  - 2 – 2.5
  - 3 - 2
  - 5 – 1.5
  - 12 – 1
  - 6 – 0 or n/a
- Annual ILS maintenance charges
  - 1 - <\$1000
  - 3 - \$1000-\$4999
  - 7 - \$5000-\$9999
  - 7 - \$10000-\$19999
  - 8 - \$20000-\$29999
  - 5 - \$30000-\$39999
  - 1 - \$40000-\$49999
  - 4 - >\$50000
- EDI?
  - 7 – yes
  - 29 – no
- Claims?
  - 5 - yes
  - 31 - no
- ILL?
  - 22 – yes
  - 10 – no
  - 4 – no entry
- ILL vendors
  - 3 – Ariel
  - 2 – Clio
  - 1 – Atlas-ILLiad
  - 11 – OCLC
  - 1 – Endeavor
  - 4 – JerseyCAT
  - 1 – Palci/E-ZBorrow
  - 11 – no entry
- ILL integrated with ILS?
  - 7 – yes
  - 19 – no
  - 10 – no entry

<b>Bibliographic records</b>	<b>Patron records (active, if possible)</b>
+70,000	8768
=~ 500,000	+20,000
1,981,708	=~ 2,000
100000	1,200
101,424	10,000
104,721	11,500
126,345	11,746

129279	12,194 current; 25,481 total
132,325	12,315*
163,000	13,933
196,389	2,000
212,535	20,652
220,000	25,009
257,204	250
319,248	2500
365,132	28550
415,365	3000
438000	3000
45,000	3000
45,000	35,000
500,000	3500
550,000	4300
572,160	4862
61,000	5677 - active within the last 12 months
65000	64,826
75000	68,000
75190	7181
80,000	7434
80,000	7630
81,999	8,000 - 10,000
85000	8900
88000	9700
99000	not sure
millions	
not sure	

### Comments

\* The "truly active" patron records is probably closer to 8,000, but we don't delete people after they graduate - they just change to alumni status.

EDI is in process with several vendors.

It is my understanding that Sirsidynix will no longer support this system but they have not given me a dead by date. I can migrate at any time to a open source system like the one in Georgia. I have full autonomy over all the library systems here.

My staff uses only the most basic features because they are not technically saavy enough to grasp the more advanced features. The client programs are not very user-friendly and the documentation is poor.

Our maintenance charge is approx. \$65K per year - paid to the county public library for staff support, hardware and software. We do not directly manage the system ourselves, but act as a "branch" of their system. However, we do our own ordering, cataloging, etc.

System Support Clarification: Library Side - Two people, each with partial responsibility together equal to a total of 1.00 person. OIT Side - Two people with partial responsibility together equal to a total of .10 person.

This system was able to do many things well, but the standard reports available without the optional 3rd party software was very poor.

Though this survey doesn't have questions about the operations side of the OLS, that is where a great deal of the money on a system is spent. Here, the ILS operations applications are Windows-based (using Sirsi C-Client), but we are moving to the Java client for operations applications this year.

Too complex, all icons no text, difficult to navigate

too numerous to mention and best saved for the meeting. :-)

Training is very expensive.

We are currently investigating federated searching and link resolver options; we would like to start

electronic ordering and claims soon.

We are in a consortium with the Cumberland County Libraries which include Cumberland County Library (the administrators of the system), Bridgeton Public, Millville Public, Vineland Public, Beth Israel Synagogue, and a few other specialty libraries. Also, the County Library is installing SIRSI in Penns Grove Public, Pennsville Public, and Salem libraries.

We hope to get federated searching from Serials Solutions sub-contracted by Sirsi Dynix. Our Open URL is with Serials Solutions.

We love it!

We plan to implement Federated Searching and Open URL services in the near future. We would like to implement a Materials/Equipment booking package also.

We share our ILS with Somerset County Library System, who administers the system. Two SCLS employees directly administers the system.

We've purchased from SirsiDynix but have not yet installed/implemented 1) ERM, 2) E-Commerce, and 3) Oracle database structure. We're also beginning to test loading EDI serials invoices.

## **Appendix 2 – Acquisitions/Serials Document**



# The Harried Library Developer's Guide to Using OFBiz as an Acquisitions/Serials Module

Version 0.1

Last Revised: April 13, 2007

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## Introduction

This document describes a bit of the inner workings of *OFBiz* <<http://ofbiz.apache.org/>>, an Apache project to create an open source enterprise automation software suite, and a specific modification of the system called *WoodChip*, designed to provide acquisitions/serials support for a library. OFBiz is a very big system, and we have recently ordered the advanced documentation training package from *Undersun Consulting* to help figure out all of its many pieces, but this guide will hopefully help you get started with what has been learned from burrowing into the code and navigating the OFBiz documentation.

## Installation and Documentation Issues

OFBiz is the basis of at least two projects where certain functionality has been added but the results are under a slightly different license. The main download site is, in fact, a project which extends OFBiz called *opentaps* <<http://www.opentaps.org/>>. Like Undersun, the providers of opentaps are also consultants, and are among the biggest contributors to the OFBiz project. Their main contribution is a CRM (Customer Relations Management) module, an interesting application, but not one that is not enabled in the WoodChip setup at this point (arguably, libraries could use CRM software, but not necessarily in an acq/ser context).

opentaps uses the *Honest Public License* for their contributions, an extension to the *GPL* that requires hosted providers to contribute code changes back to the base, a "loophole", in some ways, in the original GPL (version 3 will address this). The licensing is not considered a barrier in our implementation.

The opentaps distribution requires the Java 1.4 SDK, but is usable with 1.5+ by changing the *Java Open Transaction Manager* (JOTM) layer. If you want to try out opentaps and have Java 1.5 (OS/X users largely fall into this category), there is a modified source file and some associated jars needed to get it running.

OFBiz uses certificates for security, and the ports 8080 and 8443 must be

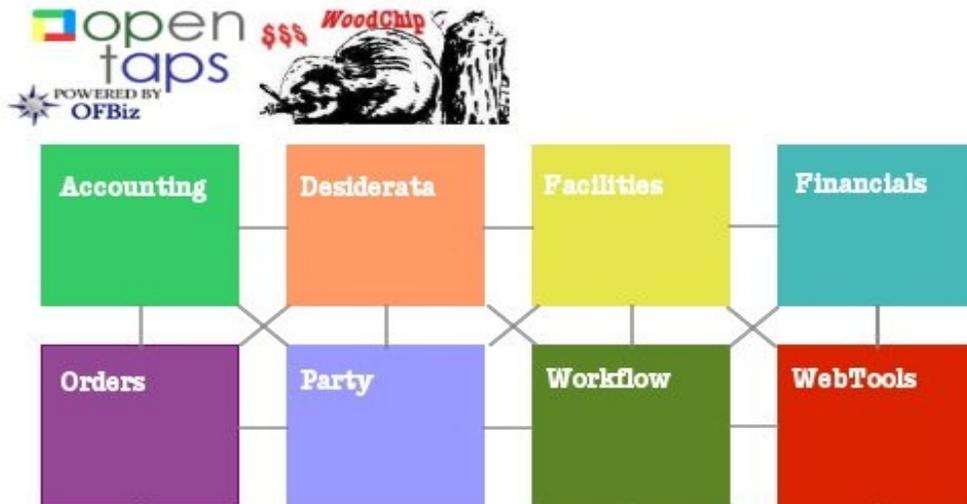
available. A sizeable amount material on the system is available online <<http://docs.ofbiz.org/>>, and the documentation is constantly being updated. The OFBiz mailing lists are also very active, Apache Foundation projects in general almost always need to show evidence of a substantial user and developer base, and OFBiz fares well on this criteria. Still, the available material, like the system itself, can be overwhelming to a first-time user.

One of the key steps to sorting out OFBiz is to understand how the “seed” and “demo” data supplied with the system fits in. For our purposes, the demo data supplies a lot of extraneous content that is not particularly useful, since much of it focuses on ecommerce. The easiest way to deal with this is to use the “run-install-seed” directive with ant when installing the system, i.e.

```
ant run-install-seed
```

When starting from scratch, OFBiz takes a while to assemble itself. The docs suggest editing the seed data for a live implementation, and I have only really stepped outside of this advice to change the Ids from “company” to “library” in some of the database entries. One of the tasks on the list for using OFBiz in a live setting is to go through the seed data in greater detail to see how it might be best set up for libraries, though it is probably easier and more sensible to set up everything interactively online. On the other hand, OFBiz has facilities for batch loading which would be useful for moving legacy financial data between systems.

After OFBiz is compiled, there are associated “startofbiz” scripts for the platform of your choice. Invoking one of these, and then going to <<http://localhost:8080/>>, gets you to something like the following:



**These modules are in a state of flux,  
but click on one to poke around...**

Click on box to access any application. For more details, look [here](#).

Don't panic at the lack of a serials option, this will be added as WoodChip becomes better defined.

This is still a somewhat confusing selection, because there are more applications than what is shown here, and in fact, the opentaps folks themselves do not expose *WebTools*, which is the maintenance layer for OFBiz, from the opening screen. But you can jump from one to the other so easily when you embark on any of the starting points that it probably doesn't matter.

By default, a stock installation of OFBiz normally looks like this:

Accounting Manager Application

Gateway Responses

AccountingPaymentGatewayResponseId   Ignore Case

AccountingOrderPaymentPreferenceId   Ignore Case

AccountingStatus

Payment Gateway Response Id	Payment Service Type Enum Id	Order Payment Preference Id	Payment Method Type Id	Payment Method Id	Trans Code Enum Id	Amount	Currency Uom Id	Reference Num	Alt Reference	Sub Reference	Gatew Code
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For WoodChip, we have changed this layout slightly (reducing the applications while retaining the underlying database tables is one of the first challenges with OFBiz, the trick is to load the associated components without displaying the applications themselves). The applications are as shown in the top list of tabs:

Accounting | Desiderata | Content | Facility | Financials | Orders | Party | Shark | WebTools | WorkEffort

**Accounting Manager Application**

Main | Agreements | Billing Accounts | Invoices | Payments | Transactions | Chart of Accounts | Fixed Assets | Tax Authorities | Companies | Logout

**Accounting Manager Main Page**

**Agreements**

- List Available Agreements

**Billing Accounts**

- Show Customer Billing Accounts

**Fixed Assets**

- Show all Fixed Assets

**Invoices**

- Show All Invoices
- Show Commission Invoices
- Show Customer Return Invoices
- Show Finance Charge Invoices
- Show Purchase Invoice Invoices
- Show Sales Invoice Invoices
- Show Approved Invoices
- Show Cancelled Invoices
- Show In-Process Invoices
- Show Paid Invoices
- Show Ready for Posting Invoices
- Show Received Invoices
- Show Sent Invoices
- Show Write Off Invoices

**Payments**

- Show all Payments
- Show Commission Payment Payments
- Show Customer Deposit Payments
- Show Customer Payment Payments
- Show Customer Refund Payments
- Show Certified Check Payments
- Show Chèque certifié Payments
- Show Company Account Payments
- Show Company Check Payments
- Show Cancelled Payments
- Show Confirmed Payments

OFBiz can greatly customized within an application, both for display and for underlying functions. Much of the functionality for “customers” is probably not needed, since the “customer” for a library would most often be a patron, and not a direct purchaser of goods/services. Several of the customer payment options will probably be removed, and marked for inclusion where libraries might find this useful (for an internal fund raising process for example, or when the library really does sell items, such as USB drives).

Every person or organization within OFBiz is a *party*, and a vendor will normally be designated as a party group. Every party/party group has a role, which can be customized. Security is also assigned to a party, this is a fairly intricate part of OFBiz, but for now, we will do everything as the default *Admin* user. Note though that working through the system usually involves an early visit to the *Party* application to define the participants in a financial process.

## Working with Purchase Orders

Like most ERP systems, OFBiz supports the concept of an *agreement*, where an external organization has certain arrangements with the library that are significant for the services provided. We create an agreement with the vendor that we want to order materials from, as shown:

### Accounting Manager Application

#### Agreements

[Create Agreement]

Agreement Id    Ignore Case  
 Product Id   
 Party Id From   
 Party Id To   
 Agreement Type Id   
 From Date   Equals   
  Less Than

Edit	Product Id	Party Id From	Party Id To	Role Type Id To	Agreement Type Id	From Date	Thru Date	Description	
<input type="button" value="10000"/>		10010	BigSupplier	Supplier	Purchase	2007-04-11 14:37:44.605		Purchasing Agreement	<input type="button" value="[Cancel]"/>

Agreements can have terms (based on date, for example, late fees associated with shipping timetables), and items (for example, the currency used to purchase from the supplier). These can all be custom defined, some examples of terms can be seen below:

Accounting Manager Application

**[ID:10000] Purchasing Agreement**

Agreement Term Id

Term Type Id

From Date

Thru Date

Term Value

Term Days

- Agreement Termination
- Clause For Renewal
- Exclusive Relationship
- Financial
- Penalty For Collection Agency
- Late Fee (percent)
- Non-Returnable Sales Item
- Payment (discounted if paid within specified days)
- Payment (due on specified day of month)
- Payment (net days)
- Incentive
- Indemnification
- Legal
- Non-Compete
- Other
- Threshold



Agreements can be based on a specific product supplied by the vendor, and a vendor can have multiple agreements for multiple products.

With an agreement in place, we go to the *Order Manager* application (Orders) to actually place an order based on our agreement. OFBiz also allows orders to be created directly against the system itself (using Sales Orders), this pane will probably will be dropped and only purchase orders will be displayed, but both options have been left in place for now:

### Order Manager Application

#### Purchase Order

Internal Organization

Supplier

User Login Id

#### Sales Order

Product Store

Sales Channel

User Login Id

Party ID



We choose the supplier, and have the option of using our previously defined agreement.

**Order Manager Application**

**Enter Order Currency, Agreements, and Ship Dates**

Select an agreement for this order

Or set a currency for this order

Default Ship After Date

Default Ship Before Date



OFBiz has a lot of child windows that open and are used for scrolling through options to populate a form. One example is below, where the product to be ordered is accessed through a *Quick Lookup*:

**Order Manager Application**

**Order Header Info**

Party:  Big Supplier

Currency: USD

Agreement: 1000

Total: US\$12.99

**Shortcuts**

- 
- 
- 
- 
- 
- 

**Choose Catalog**

**Search Catalog**

**Create Purchase Order**

Product ID:

Quantity:

Desired Delivery Date:   Use as default desired delivery date for next entry

Ship After Date:

Ship Before Date:

Comment:   Use as default comment for next entry

Item: Type:  Category:

Description:  Quantity:  Price:

**Add Order Items to Shopping List**

When the item is identified, it is possible to override the pricing at that point. OFBiz also supports the concept of shopping lists, where you keep a collection of order items in a list for reuse. If we choose to "Finalize" the order, we can use, change, or remove agreement terms:

**Order Manager Application**

**Purchase Order : Order Entry Order Terms Order Items Order Terms Shipping Options Parties Review Order Continue**

Term Type	Term Value	Term Days		
Payment (net days)		30	<input type="button" value="update"/>	<input type="button" value="remove"/>
Payment (discounted if paid within specified days)	2	10	<input type="button" value="update"/>	<input type="button" value="remove"/>



We "continue" through several options, where we can change the shipping address and add notes to the order:

**Order Manager Application**

**Ship all at once, or 'as available'?**

- Please wait until the entire order is ready before shipping.
- Please ship items I ordered as they become available (you may incur additional shipping charges).

**Special Instructions**



Orders then get to the point where they can be “approved”. OFBiz has a PDF writer to produce the order for printing in addition to gateways for digital transmission:

**Order Manager Application**

**Order #WS10010 Information [ PDF ] Approve Order**

**Status History** Current Status: Created  
Created - 2007-04-12 01:58:36.970

**Date Ordered** 2007-04-12 01:58:36.97

**Currency** USD

**Sales Channel** Unknown Channel

**Product Store**

**Origin Facility** N/A

**Created by**

**Order Terms**

Term Type	Term Value	Term Days
Payment (discounted if paid within specified days)	2	10

**Contact Information**

**Name** Big\_Supplier (  )

**Shipping Destination Address** To: XYZ  
Attn: ZJAA  
2003 Open Blvd  
Orem, UT 84058  
USA

**Shipment Information - 00001**

**Address**

**Method**

**Splitting Preference** Please wait until the entire order is ready before shipping.

**Gift?** This order is not a gift

At this point, a reader can be forgiven for wondering where the book or whatever product is being ordered has been defined. This is where the *Desiderata* application comes in, WoodChip will use this as a rolling catalogue of materials that are either on order and/or represent potential items to be ordered. The Desiderata module is linked to an external ILS for pulling in repeat orders and sharing descriptions, but also allows for a fairly sophisticated selection tool, with shopping lists and subject-based arrangements of materials.

Accounting Desiderata Content Facility Financials Orders Party Shark WebTools WorkEffort

**Catalog Manager Application**

Main Features Promos PriceRules Stores Thesaurus Reviews Configurations Logout

**Search Products**

Keywords:

Category ID:

No Contains  Any  All

Category ID:

**Advanced Search**

-Select Category-

-Product Jump

**Browse Catalogs**

- Demo Catalog
- Rental Catalog
- Test Catalog

**Browse Categories**

- Demo Browse Root [CATALOG1]
- Gift Cards [GC-100]

**Catalog Administration Main Page**

Edit Catalog with Catalog ID:

OR:

Edit Category with Category ID:

OR:

Edit Product with Product ID:

OR:

OR:

Find Product with ID Value:

Multiple catalogues can be supported, and there seems to be support for calculating the impact of various selections against an underlying budget (need to check this again).

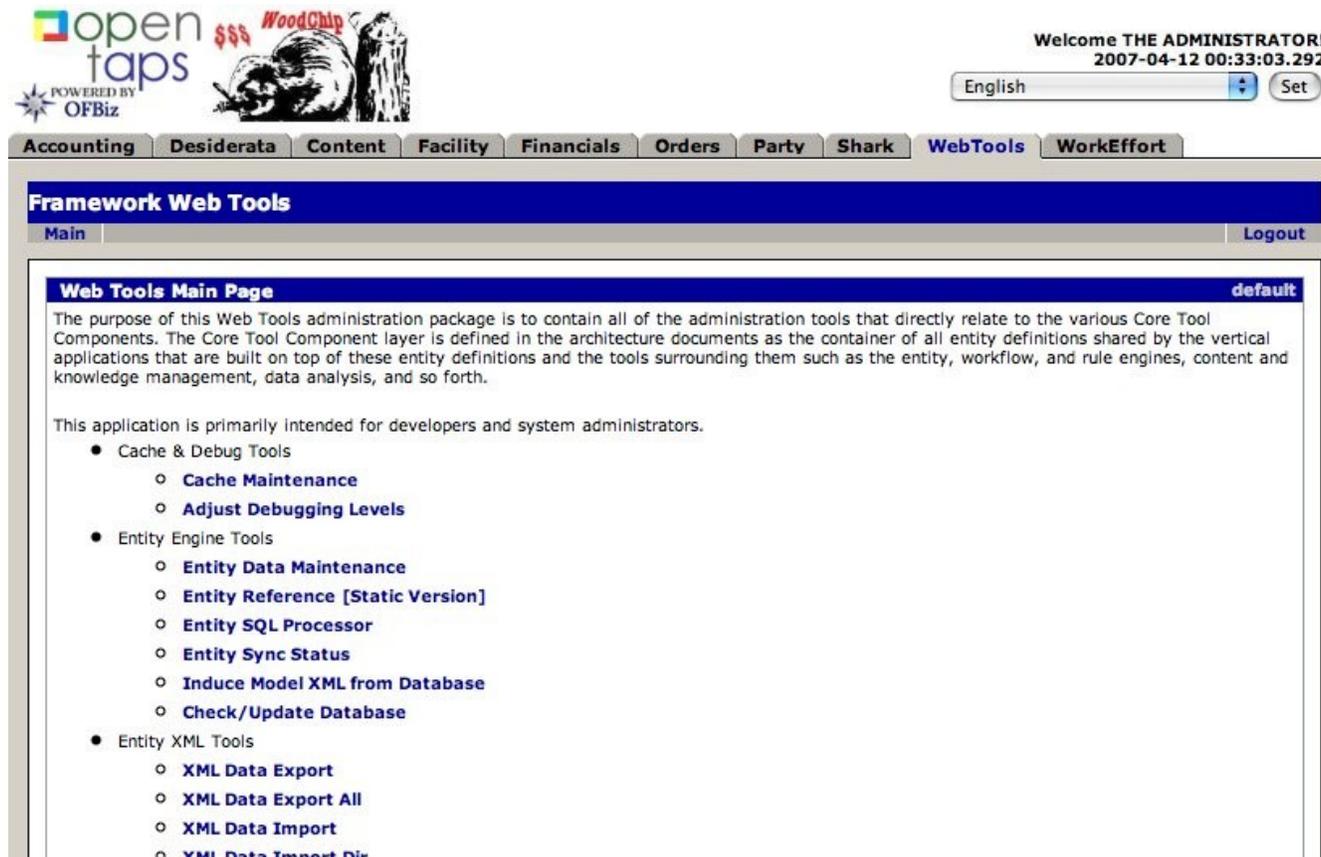
## Other Applications

At the other end of the spectrum from the Desiderata/catalogue, the *Content* application is an extremely simple creation tool. This is used, for example, for creating a survey in the Desiderata/catalogue that could be used for Faculty in a campus environment where the selection process involves more than library staff.

An organization can define facilities in the *Facility* application. This would be used for multiple shipping points and offsite storage locations.

The *Shark* and *WorkEffort* applications are closely related, both are tools for workflows. Shark is a workflow engine, and wires in XPD L workflow descriptions <http://www.wfmc.org/standards/xpdl.htm/>, which are then associated with the underlying calendar and used for defining tasks in WorkEffort. For example, if there was a constant procedure for dealing with a specific vendor based on certain situations (such as shipping the wrong material), the procedure can be codified in an XPD L file, processed by Shark, and then the tasks are listed in WorkEffort and reflected in other parts of the system.

WebTools provides the maintenance support for OFBiz, and there are options for manipulating the database engine as well as utilities for fine-tuning the overall system:



The heart of OFBiz can be found in its data mappings, which can be viewed in the *Entity Data Maintenance* link. Hundreds of standard business models are included in OFBiz, and these can be reused for new applications:

Framework Web Tools

Main

Logout

Entity Data Maintenance

Entity Name					Entity Name					Entity Name
AcctgTrans	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	InvoiceTermAttribute	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	ProductVirtualAndAssocPrices
AcctgTransAndEntries	View Entity				InvoiceType	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	ProductVirtualAndVariantInfo
AcctgTransAttribute	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	InvoiceTypeAttr	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	ProtocolType
AcctgTransEntry	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	ItemIssuance	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	QuantityBreak
AcctgTransEntryAccountSum	View Entity				ItemIssuanceRole	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	QuantityBreakType
AcctgTransEntryPartySum	View Entity				JobSandbox	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	Quote
AcctgTransEntryProdSum	View Entity				KeywordThesaurus	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	QuoteAdjustment
AcctgTransEntryProdSums	View Entity				Lot	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	QuoteAttribute
AcctgTransEntryType	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	MarketInterest	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	QuoteCoefficient
AcctgTransType	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	MarketingCampaign	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	QuoteItem
AcctgTransTypeAttr	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	MarketingCampaignAndOrderHeader	View Entity				QuoteRole
Addendum	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	MarketingCampaignAndVisit	View Entity				QuoteTerm
Affiliate	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	MarketingCampaignNote	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	QuoteTermAttribute
Agreement	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	MarketingCampaignPrice	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	QuoteType
AgreementAttribute	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	MarketingCampaignPromo	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	QuoteTypeAttr
AgreementGeographicalApplic	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	MarketingCampaignRole	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	QuoteWorkEffort
AgreementItem	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	MaxContentApprovalView	View Entity				RateType
AgreementItemAttribute	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	MaxRevisionItemView	View Entity				RecurrenceInfo
AgreementItemType	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	MetaDataPredicate	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	RecurrenceRule
AgreementItemTypeAttr	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	MimeType	<a href="#">Crt</a>	<a href="#">ReIn</a>	<a href="#">Fnd</a>	<a href="#">All</a>	RejectionReason

Finally, *Financials* gives an overview of receivables, payables, and supplies, as well as several reports, as shown:

Accounting Desiderata Content Facility **Financials** Orders Party Shark WebTools WorkEffort

**Financials**

Dashboard Receivables Payables Transactions Reports Configuration Logout

**Reports**

**Accounting**

- [Trial Balance](#)
- [Transaction Summary](#)

**Financials**

- [Income Statement](#)
- [Comparative Income Statement](#)
- [Balance Sheet](#)
- [Comparative Balance Sheet](#)
- [Cash Flow Statement](#)
- [Comparative Cash Flow Statement](#)
- [Statement of Equity](#)

**Inventory**

- [Inventory Valuation Report](#)
- [Inventory Value Detail Report](#)
- [Sales, Inventory, Profitability Analysis](#)

**Tax**

- [Tax Summary Report](#)

There are numerous options for producing reports from OFBiz, and the use of BIRT, in particular, has been shown to be an effective means of pulling information out of the underlying database, but the *Financials* application is an easy way to get an overview of the fiscal activities of the organization.

## Serials

It is almost certain that serials support will be its own application within WoodChip, like *Accounting*. There will be hooks to the XPDL layer in OFBiz for enabling publication patterns and defining appropriate workflows. The *Manufacturing* application, which is not shown here or utilized in WoodChip, provides a good base for understanding the underlying OFBiz scheduler, essential for time-based activities.

## ERM?

It seems silly to not include ERM functionality in any new acq/serials system. OFBiz already has a deep notion of digital goods, this could be leveraged effectively for ERM support within WoodChip.

**Appendix 3 –  
Comparison of Rutgers' Functional Requirements with Evergreen**

## Functional Requirements for an Integrated Library System at Rutgers

Evergreen	<b>SYSTEM REQUIREMENTS</b>
1	Support a common database for all bibliographic data.
2	Provide the ability to index on any desired field in any table.
2	Provide for the display any indexed field as selected.
2	Provide secure restore and recovery routines from transaction logs.
4	Provide for a read-only catalog when the system is unavailable.
1	Provide for stand-alone circulation when the system is unavailable.
4	Support convenient re-indexing routines in background.
4	Support selection tools to access data fields.
6	Provide up-to-date administrative documentation.
4	Support running the system on known or existing equipment.
1	Support real time changes to tables and data and support the immediate display of changes.
6	Provide a web interface to each module.
6	Use LDAP authentication for authorization/authentication.
6	Use a web interface for all modules.
	<b>ACQUISITIONS/FISCAL CONTROL</b>
5	Support the ordering of print, media, and electronic resources online and/or with paper invoices.
5	Support a variable number of fields in the acquisitions record.
5	Be able to track orders by all indexed fields.
5	Be able to place an order in any library for any other library and receive in any library.
5	Support loading of bibliographic records for shelf-ready materials.
5	Support customizable spine label printing.
5	Support the loading of vendor records to be used for orders and populate necessary fields.
5	Support EDI, Edifact and X12 for orders, invoicing, and claims.
5	Support the loading of approval plan records and populate necessary fields.
5	Support multiple types of funds and rules for each.
5	Submit transmittals electronically within the University for payment.
5	Support non-US fiscal transactions in the original currency.
5	Support customizable purchase orders.
5	Support the creation and modification of vendor records.
5	Support batch searching of the catalog or other bibliographic source by ISBN.
5	Automatically generate purchase orders for batch loaded records.
	<b>SERIALS CONTROL</b>
5	Permit creation of serials control records at any library for any other library.
5	Permit check-in and claiming of serials for any library at any other library.

## Functional Requirements for an Integrated Library System at Rutgers

5	Permit multiple serial control records to be attached to one bibliographic record.
5	Support the ability to set multiple receipt patterns.
5	Support MARC holdings.
5	Support an interface with a third-party binding subsystem.
5	Provide an electronic records management system.
	<b>CATALOGING</b>
2	Support data loads of bibliographic records from OCLC, LC, and commercial vendors with the ability to track the source and date of the record load.
1	Support original cataloging in any authorized location.
1	Allow bibliographic records to be edited, deleted or modify at any authorized location.
1	Allow holdings for any location to be added, modified, or deleted at any authorized location
1	Permit direct transfer of holdings from one record to another without deletion or re-keying.
5	Support authority control.
1	Allow selective shadowing of titles and items.
1	Support export of bibliographic records in MARC 21 format for use by partners and vendors.
5	Allow administrator-defined content of exported records.
5	Permit the creation, loading, editing, and mapping of non-MARC records.
1	Support Unicode.
6	Support "bound-with."
6	Support multiple classification schemes.
1	Support quick addition of volumes and barcodes for multi-volumes sets.
2	Autogenerate barcodes to complete records without physical barcodes.
6	Support templates for data entry in a variety of formats.
	<b>CIRCULATION</b>
1	Support circulation rules linking borrower type with material type.
1	Support varying circulation time periods based on type of borrower
1	Allow borrowers to place holds on materials.
6	Automatically generate recalls for materials with holds and reduce the loan period to meet the recall due date.
4	Permit charging and discharging of circulating materials at any location without operator intervention.
4	Create an in-transit category while materials are being relocated to the home or requested location.
4	Circulating materials held in any library must be available for loan, recall, discharge, or reserve in any other library without permanently changing the original shelving location and without requiring reset of operator controls.

## Functional Requirements for an Integrated Library System at Rutgers

4	Support a flexible fine system with both pre-set amounts and the option of waiving fines and resetting the amount based on operator permissions.
4	Permit payment of fines or waiving of fines at any location without requiring operator resetting controls.
1	Permit the creation of bills and payment of fees regardless of owning library at any location.
1	Support self check-out.
4	Automatically generate a report when more than a set number of holds have been placed on a single item.
1	Support multiple borrower types and user policies.
1	Support NCIP and SIP2.
1	Allow circulation-on-the-fly for materials without barcodes and/or catalog records.
4	Support patron privacy in history and transaction logs.
4	Support print and email notices.
2	Support the importing of patron records from an external provider.
New	Support the exporting of patron records to a third-party.
	<b>ACADEMIC RESERVES</b>
6	Permit placing both library and non-library materials on short-term reserve.
6	Support reserve circulation time periods of minutes, hours, days, and weeks.
6	Support reserve of print, media, and electronic materials.
6	Provide for a separate fine structure for reserve circulation.
6	Support batch removal of reserve items at the end of the semester or reserve period.
6	Mask selective reserve holdings from the online catalog.
6	Support retrieval of reserve holdings by course number, course name, instructor, and title of reserve item.
6	Interface with course management systems, e.g. Sakai, WebCT, Blackboard.
	<b>BOOKING</b>
6	Permit online booking of media materials by type of user.
6	Include flexible scheduling with built-in travel and service periods.
6	Support materials booking fine schedule.
6	Integrate bookings and academic reserves.
	<b>MATERIALS DELIVERY SERVICE</b>
4	Generate a materials pick-up list based on a locally-defined library algorithm.
4	Include provisions for loans and/or of physical volumes, media, photocopies, and digital images.
4	Automatically select next available copy to fill a request if the first copy is not available.
4	Automatically provide notices for staff of requested materials that have not yet been received and/or cataloged.
1	Support automatic generation of patron notices when materials are available or unavailable.

## Functional Requirements for an Integrated Library System at Rutgers

	<b>CATALOG</b>
1	Display records and holdings for all libraries and allow limit to specific libraries and/or material types.
4	Permit sorting of search results by all indexed fields.
1	Include a spell check or “did you mean” option.
1	Support both quick and advanced searching
6	Support LDAP authentication for single sign-on and to access personal account authorization.
1	Support search and browse by all indexed fields.
6	Provide link to ILL.
6	Support e-commerce.
6	Support link to PALCI.
6	Support academic reserve look-up through the catalog.
4	Support faceted browsing.
1	Provide authenticated access to “my account” to view requested materials, items on loan, submit renewals, and view bills and fines.
1	Support third-party enhancements to the catalog, e.g. dust jackets, reviews, etc.
4	Support “kept lists” and ability to export records to RefWorks and other bibliographic citation systems.
1	Provide the ability to browse the shelves for all libraries or just one library.
	<b>REPORT GENERATION</b>
4	Provide management reports for all of the above functions
4	Provide canned reports for standard reports.
4	Support administrative report-writing generation.
4	Provide the capability to produce desktop “as-needed” reports.
New	Support output of all reports in standard formats for import into desktop software programs.
	Key to Evergreen responses:
	1. Currently has the feature.
	2. Has the feature, configurable through scripts, db, etc.
	3. Has the feature, configurable through administrative interfact
	4. Probably has the feature, requires more discussion.
	5. Will have it implemented soon for PINES
	6. Requires development.
	New. Added after meeting with Evergreen developers.

## **Appendix 4 – Job Descriptions**



## Board of Regents of the University System of Georgia Job Description

**Job Title:** Senior Software Engineer

**Division:** Georgia Public Library Service

**Department:** External Activities and Facilities

**Employee Name:** Vacant

**Reports To:** Julie Walker, Assistant State Librarian for Library Technology Services

**Location:** 1800 Century Place, NE, Suite 150, Atlanta, Ga 30345

**FLSA Status:** Professional

**Prepared By:** Julie Walker

**Prepared Date:** 9 February 2007

**Reviewed By:** David W. Singleton

**Approved By:** Dr. Lamar Veatch

**Approved Date:**

### Summary

This position is highly skilled, requiring complex technical and professional work in planning and developing server software applications for the operations of the integrated library system (ILS) associated with the Public Information Network for Electronic Services (PINES), a consortium of public libraries operating on a central server. Under limited supervision, provides senior level support in the analysis, design, development, testing, documentation and implementation of highly complex software

**Essential Duties and Responsibilities** include the following. Other duties may be assigned.

Analyzes user requirements; determine definitions and design specifications

Develops, tests and implements computer systems and programs

Analyzes, modifies and maintains existing computer systems/programs

Determines and resolves system and program problems; coordinates communication with vendors when appropriate for problem resolution.

Writes technical/operational/user documentation

Provides technical support to users, including assisting functional users with adequate testing of applications prior to production mode.

Assists in the development of standards and guidelines; ensures compliance of all standard and guidelines

Prepares direct training efforts for end users as needed.

Provides estimates of technical effort for projects when needed.

Monitors project scheduling and all project tracking control systems.

Plans and designs complex server-side applications and logical structures

Provides technical guidance on all aspects of efficient implementation of systems, including installing major systems and associated software and hardware, enhancement and integration activities, as well as maintenance and support.

Establishes metrics to improve business processes.

Researches and recommends enhancements to the infrastructure, provides technical expertise in the evaluation of new technologies, and prepares cost/benefit analyses for buy vs. build recommendations.

Plans for and implements major software upgrades and new hardware and software releases.

Provides technical support to project team members.

Leads others in analyzing assigned specifications; codes, tests, and implements software solutions utilizing appropriate software engineering processes.

Provides Tier II and Tier III support regarding problems with hardware, operating systems, components, and related utilities in servers. Handles support issues across multiple areas of expertise and escalates issues as needed.

Displays a high level of effort and commitment to performing work; operates effectively within the organizational structure; demonstrates trustworthiness and responsible behavior.

### **Language Skills**

Ability to read, analyze, and interpret general business periodicals, professional journals, technical procedures, or governmental regulations. Ability to write reports, business correspondence, and procedure manuals. Ability to effectively present information and respond to questions from groups of managers, clients, customers, and the general public.

### **Mathematical Skills**

Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of plane and solid geometry and trigonometry. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

## **Reasoning Ability**

Ability to define problems, collect data, establish facts, and draw valid conclusions. Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables.

## **Competencies**

To perform the job successfully, an individual should demonstrate the following competencies:

**Analytical** - Synthesizes extremely complex or diverse information; Collects and researches data; Uses intuition and experience to complement data; Designs and documents work flows and procedures.

**Problem Solving** - Identifies and resolves problems in a timely manner; Gathers and analyzes information skillfully; Develops creative and alternative solutions; Works well in group problem solving situations; Uses reason even when dealing with emotional topics.

**Technical Skills** - Assesses own strengths and weaknesses; Pursues training and development opportunities; Strives to continuously build knowledge and skills; Shares expertise with others.

**Oral Communication** - Speaks clearly and persuasively in positive or negative situations; Listens and gets clarification; Responds well to questions and requests for assistance; Demonstrates group presentation skills; Participates in meetings.

**Written Communication** - Writes clearly and informatively; Edits work for spelling and grammar; Varies writing style to meet needs; Presents numerical data effectively; Able to read and interpret written information.

**Teamwork** - Balances team and individual responsibilities; Exhibits objectivity and openness to others' views; Gives and welcomes feedback; Contributes to building a positive team spirit; Puts success of team above own interests; Able to build morale and group commitments to goals and objectives; Supports everyone's efforts to succeed.

**Leadership** - Exhibits confidence in self and others; Inspires and motivates others to perform well; Effectively influences actions and opinions of others; Accepts feedback from others; Gives appropriate recognition to others.

**Quality Management** - Looks for ways to improve and promote quality; Demonstrates accuracy and thoroughness.

**Ethics** - Treats people with respect; Keeps commitments; Inspires the trust of others; Works with integrity and ethically; Upholds organizational values.

**Organizational Support** - Follows policies and procedures; Supports organization's goals and values; Supports affirmative action and respects diversity.

**Judgment** - Displays willingness to make decisions; Exhibits sound and accurate judgment; Supports and explains reasoning for decisions; Includes appropriate people in decision-making process; Makes timely decisions.

**Motivation** - Sets and achieves challenging goals; Demonstrates persistence and overcomes obstacles; Measures self against standard of excellence; Takes calculated risks to accomplish goals.

Planning/Organizing - Prioritizes and plans work activities; Uses time efficiently; Plans for additional resources; Sets goals and objectives; Organizes or schedules other people and their tasks; Develops realistic action plans.

Professionalism - Approaches others in a tactful manner; Reacts well under pressure; Treats others with respect and consideration regardless of their status or position; Accepts responsibility for own actions; Follows through on commitments.

Quality - Demonstrates accuracy and thoroughness; Looks for ways to improve and promote quality; Applies feedback to improve performance; Monitors own work to ensure quality.

Adaptability - Adapts to changes in the work environment; Manages competing demands; Changes approach or method to best fit the situation; Able to deal with frequent change, delays, or unexpected events.

Attendance/Punctuality - Is consistently at work and on time; Ensures work responsibilities are covered when absent; Arrives at meetings and appointments on time.

Dependability - Follows instructions, responds to management direction; Takes responsibility for own actions; Keeps commitments; Commits to long hours of work when necessary to reach goals.; Completes tasks on time or notifies appropriate person with an alternate plan.

Initiative - Volunteers readily; Undertakes self-development activities; Seeks increased responsibilities; Takes independent actions and calculated risks; Looks for and takes advantage of opportunities; Asks for and offers help when needed.

Innovation - Displays original thinking and creativity; Meets challenges with resourcefulness; Generates suggestions for improving work; Develops innovative approaches and ideas; Presents ideas and information in a manner that gets others' attention.

### **Certificates, Licenses, Registrations**

Must have a valid driver's license.

### **Computer Skills**

To perform this job successfully, an individual should have knowledge of Database software; Design software; Development software; Internet software; Project Management software; Spreadsheet software and Word Processing software, Unix and Windows operating systems; Knowledge of network principles; Knowledge of system level utilities. To perform this job successfully an individual must be proficient in the following programming languages: C, C++, Perl, PHP, Java, Javascript, and shell scripting. Must have a strong background in the Unix (Solaris, Linux, and BSD) environment. Must have knowledge of modern relational databases. Must have experience in large-scale software development.

### **Other Skills and Abilities**

Excellent people skills, self-starter, ability to work independently and ability to multi-task; Knowledge of modern office practices, procedures, and equipment; Advanced knowledge in PC applications and PC operations; Knowledge of system administration for an integrated library system; Ability to compose a variety of correspondence; Ability to prepare and maintain comprehensive records and reports; Ability to apply innovative technologies in library settings. Ability to prioritize many demands in a fast moving and constantly changing environment; Ability to establish and maintain effective working relationships with supervisor,

associates and the general public; Skill in database administration; Skill in troubleshooting, networking and configuration. Skills in Helpdesk/Customer support environment.

### **Other Qualifications**

Moderate travel is required.

### **Physical Demands**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this Job the employee is regularly required to talk or hear. The employee is frequently required to stand; walk; sit and use hands to finger, handle, or feel. The employee is occasionally required to reach with hands and arms; climb or balance; stoop, kneel, crouch, or crawl and taste or smell. The employee must frequently lift and/or move up to 10 pounds and occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

### **Education and/or Experience**

Bachelor's Degree in Computer Science, Information Technology or 4 years of professional programming work experience. Demonstrated experience in C, C++, Perl, PHP, Java, Javascript, and UNIX. Experience with administration of large-scale server-side software packages, including in-depth configuration, reporting, administration, trouble-shooting, and user instruction.

Prefer three to five years of experience with the administration of library technology applications, including experience with integrated library systems.

### **Comments**

Note: This position description may not describe all duties, responsibilities and skills associated with this position. It is intended to portray the major aspects of the job. Other duties or skills may be required.



## Board of Regents of the University System of Georgia Job Description

**Job Title:** Project Coordinator  
**Division:** External Affairs  
**Department:** Georgia Public Library Service  
**Employee Name:** Elizabeth McKinney de Garcia  
**Reports To:** David Singleton  
**Location:** Clairmont  
**FLSA Status:**  
**Prepared By:** Elizabeth McKinney de Garcia  
**Prepared Date:** 12/19/2001  
**Approved By:**  
**Approved Date:**

**Summary** Under the broad supervision of the PINES Project Manager, performs advanced level duties associated with overseeing the daily operations of the Public Information Network for Electronic Services (PINES), a consortium of Georgia public libraries joined by a centralized integrated library system. Gathers and maintains the site- and system-specific information for use by member libraries. Develops and distributes documentation of system policies and procedures.

**Essential Duties and Responsibilities** include the following. Other duties may be assigned.

- Monitors daily operations of the PINES system
- Provides professional level assistance to the PINES Project Manager
- Provides professional support and assistance to PINES member libraries
- Performs special projects as assigned by Supervisor
- Serves as primary contact for outside vendors; ensures processing of all invoices.
- Coordinates the activities and records of the PINES Executive Committee, and other PINES committees as required
- Gathers data for decision-making from PINES facilities and other sources as required
- Monitors communication from outside sources as well as throughout the PINES system, and disseminates as appropriate
- Participates in planning and implementation of upgrades or improvements to the system

### **Supervisory Responsibilities**

There are no supervisory responsibilities.

### **Language Skills**

Ability to read, analyze, and interpret general business periodicals, professional journals, technical procedures, or governmental regulations. Ability to write reports, business

correspondence, and procedure manuals. Ability to effectively present information and respond to questions from groups of managers, clients, customers, and the general public.

### **Mathematical Skills**

Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of plane and solid geometry and trigonometry. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

### **Reasoning Ability**

Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form.

### **Certificates, Licenses, Registrations**

Georgia Professional Librarian Certification is strongly preferred.

### **Other Skills and Abilities**

In-depth understanding of library technology and user access issues  
Understanding of Knowledge Management Principles  
Ability to apply principles of Knowledge Management in the work environment  
Excellent customer services skills  
Strong customer service management skills  
Thorough knowledge of public library principles, practices, procedures, and operations  
Considerable knowledge of MARC formats for bibliographic data  
Familiarity with the Library of Congress Classification System and Subject headings  
Knowledge of BOR/OPLS policies and procedures, and PINES policies and procedures  
Ability to perform well under pressure

### **Other Qualifications**

### **Physical Demands**

While performing the duties of this job, the employee is regularly required to talk or hear. The employee is frequently required to sit. Must be able to lift up to 50 pounds. Must be able to see clearly at 20 inches or less or be able to perform duties using computer accessibility software for the visually impaired.

### **Work Environment.**

Must be able to work in a busy or noisy office environment.

### **Competencies**

To perform the job successfully, an individual should demonstrate the following competencies:

Analytical - Synthesizes complex or diverse information; Collects and researches data; Uses intuition and experience to complement data; Designs work flows and procedures.

Design - Generates creative solutions; Translates concepts and information into images; Uses feedback to modify designs; Applies design principles; Demonstrates attention to detail.

Problem Solving - Identifies and resolves problems in a timely manner; Gathers and analyzes information skillfully; Develops alternative solutions; Works well in-group problem solving situations; Uses reason even when dealing with emotional topics.

Project Participation - Develops project plans; Coordinates projects; Communicates changes and progress; Completes projects on time;

Technical Skills - Assesses own strengths and weaknesses; Pursues training and development opportunities; Strives to continuously build knowledge and skills; Shares expertise with others.

Customer Service - Manages difficult or emotional customer situations; Responds promptly to customer needs; Solicits customer feedback to improve service ; Responds to requests for service and assistance; Meets commitments.

Interpersonal Skills - Focuses on solving conflict, not blaming; Maintains confidentiality; Listens to others without interrupting; Keeps emotions under control; Remains open to others' ideas and tries new things.

Oral Communication - Speaks clearly and persuasively in positive or negative situations; Listens and gets clarification; Responds well to questions; Demonstrates group presentation skills; Participates in meetings.

Written Communication - Writes clearly and informatively; Edits work for spelling and grammar; Varies writing style to meet needs; Presents numerical data effectively; Able to read and interpret written information.

Teamwork - Balances team and individual responsibilities; Exhibits objectivity and openness to others' views; Gives and welcomes feedback; Contributes to building a positive team spirit; Puts success of team above own interests; Able to build morale and group commitments to goals and objectives; Supports everyone's efforts to succeed.

Visionary Leadership - Displays passion and optimism; Inspires respect and trust; Mobilizes others to fulfill the vision; Provides vision and inspiration to peers and subordinates.

Change Management - Develops workable implementation plans; Communicates changes effectively; Builds commitment and overcomes resistance; Prepares and supports those affected by change; Monitors transition and evaluates results.

Leadership - Exhibits confidence in self and others; Inspires and motivates others to perform well; Effectively influences actions and opinions of others; Accepts feedback from others; Gives appropriate recognition to others.

Quality Management - Looks for ways to improve and promote quality; Demonstrates accuracy and thoroughness.

Business Acumen - Understands business implications of decisions; Displays orientation to profitability; Demonstrates knowledge of market and competition; Aligns work with strategic goals.

Diversity - Demonstrates knowledge of EEO policy; Shows respect and sensitivity for cultural differences; Educates others on the value of diversity; Promotes a harassment-free environment; Builds a diverse workforce.

Ethics - Treats people with respect; Keeps commitments; Inspires the trust of others; Works with integrity and ethically; Upholds organizational values.

Organizational Support - Follows policies and procedures; Completes administrative tasks correctly and on time; Supports organization's goals and values; Benefits organization through outside activities; Supports affirmative action and respects diversity.

Strategic Thinking - Develops strategies to achieve organizational goals; Understands organization's strengths & weaknesses; Analyzes market and competition; Identifies external threats and opportunities; Adapts strategy to changing conditions.

Judgement - Displays willingness to make decisions; Exhibits sound and accurate judgment; Supports and explains reasoning for decisions; Includes appropriate people in decision-making process; Makes timely decisions.

Motivation - Sets and achieves challenging goals; Demonstrates persistence and overcomes obstacles; Measures self against standard of excellence; Takes calculated risks to accomplish goals.

Planning/Organizing - Prioritizes and plans work activities; Uses time efficiently; Plans for additional resources; Sets goals and objectives; Organizes or schedules other people and their tasks; Develops realistic action plans.

Professionalism - Approaches others in a tactful manner; Reacts well under pressure; Treats others with respect and consideration regardless of their status or position; Accepts responsibility for own actions; Follows through on commitments.

Quality - Demonstrates accuracy and thoroughness; Looks for ways to improve and promote quality; Applies feedback to improve performance; Monitors own work to ensure quality.

Quantity - Meets productivity standards; Completes work in timely manner; Strives to increase productivity; Works quickly.

Safety and Security - Observes safety and security procedures; Determines appropriate action beyond guidelines; Reports potentially unsafe conditions ; Uses equipment and materials properly.

Adaptability - Adapts to changes in the work environment; Manages competing demands; Changes approach or method to best fit the situation; Able to deal with frequent change, delays, or unexpected events.

Attendance/Punctuality - Is consistently at work and on time; Ensures work responsibilities are covered when absent; Arrives at meetings and appointments on time.

Dependability - Follows instructions, responds to management direction; Takes responsibility for own actions; Keeps commitments; Commits to long hours of work when necessary to reach goals.; Completes tasks on time or notifies appropriate person with an alternate plan.

Initiative - Volunteers readily; Undertakes self-development activities; Seeks increased responsibilities; Takes independent actions and calculated risks; Looks for and takes advantage of opportunities; Asks for and offers help when needed.

Innovation - Displays original thinking and creativity; Meets challenges with resourcefulness; Generates suggestions for improving work; Develops innovative approaches and ideas; Presents ideas and information in a manner that gets others' attention.

### **Education and/or Experience**

Bachelor's degree and four years of progressively responsible library experience, including three years in the assigned functional area; or a Master's degree in library or information science and two years of progressively responsible library experience; or an equivalent combination of training and experience.

### **Computer Skills**

To perform this job successfully, an individual should have knowledge of MARC formats for bibliographic data, familiarity with the Library of Congress Classification System and Subject headings, extensive HTML, CSS and other web development skills, internet architecture and web design skills, experience with imaging software, database software, design software, spreadsheet software and word processing software.

### **Comments**

File —  
GPLS —

**MEMORANDUM**

To: Rob Watts  
CC: Bill Bowes  
Sherea Frazer  
Tom Maier  
From: Lamar Veatch  
Re: Quality Assurance Engineer  
Date: March 13, 2007

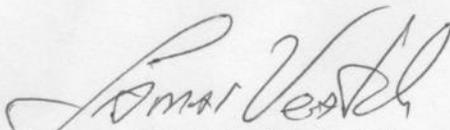
The development and implementation of the Evergreen software as an in-house program of the Georgia Public Library Service has created the urgent necessity for Quality Assurance evaluation on a full-time, on-going basis. Quality Assurance provides fact-based external confidence to customers and other stakeholders that a product meets needs, expectations, and essential requirements. QA assures the existence and effectiveness of procedures and testing that confirm expected levels of quality and standards.

Discussions with Dr. Tom Maier and Jim Flowers in Information and Instruction Technology have confirmed that Quality Assurance is an essential element for a project of this complexity and scope, to ensure high quality and error-free releases in production software used by 265 of Georgia's public libraries. Enterprise-level software development demands due diligence in the thorough testing of such software.

Currently, the Georgia Public Library Service does not have a position devoted to Quality Assurance. Attached please find a proposed job description for a Quality Assurance Engineer for the PINES/Evergreen program at GPLS. We propose to use the position which will be vacated by the retirement of Susan N. Robert for this purpose.

With this memo, I am requesting 1) approval for GPLS to proceed with the creation of this new position, and 2) an expedited classification of this new position so that it can be advertised.

Please feel free to contact me with any questions regarding this position.

  
Lamar Veatch, State Librarian



**Board of Regents of the Univ. System of Georgia  
Job Description**

**Job Title:** PINES Quality Assurance Engineer  
**Department:** Georgia Public Library Service  
**Employee Name:** vacant  
**Reports To:** PINES Program Director  
**Location:** 1800 Century Place, Suite 150 Atlanta  
**FLSA Status:** Professional  
**Prepared By:** Julie Walker, Assistant State Librarian for Technology Services  
**Prepared Date:** October 25, 2006  
**Approved By:** Lamar Veatch, State Librarian  
**Approved Date:** March 13, 2007

**Summary**

This position is highly skilled, advanced level requiring complex technical and professional work in planning and developing quality assurance software engineering for the operations of the integrated library system (ILS) associated with the Public Information Network for Electronic Services (PINES), a consortium of 252 libraries operating on a central server. Under limited supervision, performs quality assurance software engineering tasks to assist in the development, maintenance, and support of complex library software; diagnoses and assists in resolving system issues and highly complex problems. Provides technical assistance on all aspects of efficient implementation of systems, including installing major systems and associated software and hardware, enhancement and integration activities, as well as maintenance and support. Assists in system and platform configuration, testing, development, and evaluations. Assists in the implementation of major software upgrades and new hardware and software releases. Provides Tier I and II support and handles support across multiple areas of expertise.

**Essential Duties and Responsibilities** include the following. Other duties may be assigned.

Designs and develops an over-arching software quality assurance test procedure and framework, including tasks such as regression, unit testing, and technical documentation.

Documents and investigates bugs and issues within complex systems and software in order to assist the area specialist software developers in identifying and resolving issues.

Documents all operating system and/or database management system changes, problem resolutions, and integration and conversion plans.

Serves as a technical resource for internal and external customers; provides technical assistance on the efficient implementation and operation of systems.

Participates in project planning sessions with team members to analyze requirements and design systems. Recommends and assists in the creation of action plans for systems development and/or integration.

Works internally with development and systems administration teams in defining long-term requirements, defining support needs and infrastructure to provide support to mission critical application.

Assists in disaster-recovery efforts, according to established guidelines and procedures.

Recommends actions and provide analysis & troubleshooting for possible hardware, software, network, process, and system failures.

Attends seminars, conferences, job-related training and other staff development training programs. May serve on committees and task forces.

Maintains knowledge of current industry trends and developments in the field by reading appropriate books, journals, and other literature and attending related seminars and conferences.

Displays a high level of effort and commitment to performing work; operates effectively within the organizational structure; demonstrates trustworthiness and responsible behavior

Effectively conveys complex technical subject matter expertise to fellow employees, management and high end customers via several channels such as training, customer site visits, and internal or remote support engagements.

Monitors, evaluates and assesses information system processes, procedures and technologies to improve efficiency and ensure quality

Mentors lesser experienced analysts and personally coaches and mentors employees in the correct support processes and procedures.

### **Supervisory Responsibilities**

This is a non-supervisory position.

### **Language Skills**

Ability to read, analyze, and interpret general business periodicals, professional journals, technical procedures, or governmental regulations. Ability to write reports, business correspondence, and procedure manuals. Ability to effectively present information and respond to questions from managers, co-workers and customers.

### **Mathematical Skills**

Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

### **Reasoning Ability**

Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization may exist. Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form.

## **Competencies**

To perform the job successfully, an individual should demonstrate the following competencies:

Analytical - Synthesizes extremely complex or diverse information; Collects and researches data; Uses intuition and experience to complement data; Designs and documents work flows and procedures.

Problem Solving - Identifies and resolves problems in a timely manner; Gathers and analyzes information skillfully; Develops creative and alternative solutions; Works well in group problem solving situations; Uses reason even when dealing with emotional topics.

Technical Skills - Assesses own strengths and weaknesses; Pursues training and development opportunities; Strives to continuously build knowledge and skills; Shares expertise with others.

Oral Communication - Speaks clearly and persuasively in positive or negative situations; Listens and gets clarification; Responds well to questions and requests for assistance; Demonstrates group presentation skills; Participates in meetings.

Written Communication - Writes clearly and informatively; Edits work for spelling and grammar; Varies writing style to meet needs; Presents numerical data effectively; Able to read and interpret written information.

Teamwork - Balances team and individual responsibilities; Exhibits objectivity and openness to others' views; Gives and welcomes feedback; Contributes to building a positive team spirit; Puts success of team above own interests; Able to build morale and group commitments to goals and objectives; Supports everyone's efforts to succeed.

Leadership - Exhibits confidence in self and others; Inspires and motivates others to perform well; Effectively influences actions and opinions of others; Accepts feedback from others; Gives appropriate recognition to others.

Quality Management - Looks for ways to improve and promote quality; Demonstrates accuracy and thoroughness.

Ethics - Treats people with respect; Keeps commitments; Inspires the trust of others; Works with integrity and ethically; Upholds organizational values.

Organizational Support - Follows policies and procedures; Supports organization's goals and values; Supports affirmative action and respects diversity.

Judgment - Displays willingness to make decisions; Exhibits sound and accurate judgment; Supports and explains reasoning for decisions; Includes appropriate people in decision-making process; Makes timely decisions.

Motivation - Sets and achieves challenging goals; Demonstrates persistence and overcomes obstacles; Measures self against standard of excellence; Takes calculated risks to accomplish goals.

Planning/Organizing - Prioritizes and plans work activities; Uses time efficiently; Plans for additional resources; Sets goals and objectives; Organizes or schedules other people and their tasks; Develops realistic action plans.

Professionalism - Approaches others in a tactful manner; Reacts well under pressure; Treats others with respect and consideration regardless of their status or position; Accepts responsibility for own actions; Follows through on commitments.

Quality - Demonstrates accuracy and thoroughness; Looks for ways to improve and promote quality; Applies feedback to improve performance; Monitors own work to ensure quality.

Adaptability - Adapts to changes in the work environment; Manages competing demands; Changes approach or method to best fit the situation; Able to deal with frequent change, delays, or unexpected events.

Attendance/Punctuality - Is consistently at work and on time; Ensures work responsibilities are covered when absent; Arrives at meetings and appointments on time.

Dependability - Follows instructions, responds to management direction; Takes responsibility for own actions; Keeps commitments; Commits to long hours of work when necessary to reach goals.; Completes tasks on time or notifies appropriate person with an alternate plan.

Initiative - Volunteers readily; Undertakes self-development activities; Seeks increased responsibilities; Takes independent actions and calculated risks; Looks for and takes advantage of opportunities; Asks for and offers help when needed.

Innovation - Displays original thinking and creativity; Meets challenges with resourcefulness; Generates suggestions for improving work; Develops innovative approaches and ideas; Presents ideas and information in a manner that gets others' attention.

### **Certificates, Licenses, Registrations**

Not Applicable to this position.

### **Computer Skills**

To perform this job successfully, an individual should have knowledge of Database software; Design software; Development software; Internet software; Project Management software; Spreadsheet software and Word Processing software, Unix and Windows operating systems; Knowledge of network principles; Knowledge of system level utilities. To perform this job successfully an individual must be proficient in the following programming languages: C, C++, Perl, PHP, Java, Javascript, and shell scripting. Must have a strong background in the Unix (Solaris, Linux, and BSD) environment. Must have strong database administration skills, and experience in Oracle, MySQL, Postgresql, and DB2. Must have experience in large-scale software development and high-load mission-critical databases.

### **Other Skills and Abilities**

Excellent people skills, self-starter, ability to work independently and ability to multi-task; Knowledge of modern office practices, procedures, and equipment; Advanced knowledge in PC applications and PC operations; Knowledge of system administration for an integrated library system; Ability to compose a

variety of correspondence; Ability to prepare and maintain comprehensive records and reports; Ability to apply innovative technologies in library settings. Ability to prioritize many demands in a fast moving and constantly changing environment; Ability to establish and maintain effective working relationships with supervisor, associates and the general public; Skill in troubleshooting, networking and configuration. Skills in Helpdesk/Customer support environment.

### **Other Qualifications**

Moderate travel is required.

### **Physical Demands**

While performing the duties of this Job, the employee is regularly required to speak or hear. The employee is frequently required to stand; walk; sit; use hands to perform repetitive data entry at a computer keyboard and monitor; reach with hands and arms. The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

### **Education and/or Experience**

Bachelor's Degree in Computer Science, Information Technology or 4 years of professional programming work experience. Demonstrated experience in C, C++, Perl, PHP, Java, Javascript, and Linux.

Prefer three to five years of experience with the administration of library technology applications, including experience with integrated library systems.

### **Work Environment**

The noise level in the work environment is usually moderate

### **Comments**



## **Board of Regents of the University System of Georgia Job Description**

**Job Title:** Program Director - PINES

**Division:** Georgia Public Library Service

**Department:** External Activities and Facilities

**Employee Name:** Julie Walker

**Reports To:** David W. Singleton

**Location:** 1800 Century Place, Suite 150, Atlanta, GA 30345

**FLSA Status:** Professional

**Prepared By:** David W. Singleton

**Prepared Date:** December 20, 2001

**Reviewed By:** Deborah Scott

**Approved By:** Dr. Lamar Veatch

**Approved Date:** March 26, 2002

### **Summary**

Under broad supervision, plans, directs, and coordinates activities of the Public Information Network for Electronic Services (PINES), a consortia of 209 public libraries with a shared integrated library system operating on a shared server, to ensure that the goals or objectives of the program are accomplished within the prescribed time frame and the funding parameters by performing the following duties personally or through subordinate supervisors. Supervises employees and contracted vendors. Coordinates activities of Executive Board and user groups.

**Essential Duties and Responsibilities** include the following. Other duties may be assigned.

Reviews program proposal or plan to determine time frame, funding limitations, procedures for accomplishing program, staffing requirements, and allotment of available resources to various phases of program.

Establishes work plan and staffing for each phase of program and arranges for recruitment or assignment of program personnel.

Confers with program staff to outline work plan and to assign duties, responsibilities, and scope of authority.

Directs and coordinates activities of program personnel to ensure program progresses on schedule and within prescribed budget.

Reviews status reports prepared by program personnel and modify schedules or plans as required.

Prepares program reports for management, client, or other personnel.

Confers with program personnel to provide technical advice and to resolve problems.

Coordinates program activities with GPLS State Librarian and the Supervisors of Administrative Support Services and Technology.

Coordinates program activities with activities of government regulatory or other governmental agencies.

Evaluates program vendor contracts and recommends any continuation of those services as needed.

Monitors and authorizes contractors' work on the project. Reviews and recommends approval of all deliverables and payables with the approval of the supervisor.

Supervises, coordinates and evaluates the activities of PINES program employees.

Attends, supports and advises the PINES User Group.

Attends, supports and advises the PINES Executive Committee and appropriate subcommittees to continue program libraries involvement with PINES policies and other matters.

Attends seminars, conferences, job-related training and other staff development training programs. May serve on committees and task forces.

Maintains knowledge of current trends and developments in the field by reading appropriate books, journals, and other literature and attending related seminars and conferences.

Coordinate special projects and programs. Serves on special task forces, study committees or other designated groups.

Provides and supports division leadership by actively participating as a management team member to establish and accomplish division goals and objectives.

Displays a high level of effort and commitment to performing work; operates effectively within the organizational structure; demonstrates trustworthiness and responsible behavior.

### **Supervisory Responsibilities**

Directly supervises 6 subordinates and 1 to 4 contractors. Is responsible for the overall direction, coordination, and evaluation of these units. Carries out supervisory responsibilities in accordance with the organization's policies and applicable laws. Responsibilities include interviewing, hiring, and training employees; planning, assigning, and directing work; appraising performance; rewarding and disciplining employees; addressing complaints and resolving problems.

### **Language Skills**

Ability to read, analyze, and interpret general business periodicals, professional journals, technical procedures, or governmental regulations. Ability to write reports, business correspondence, and

procedure manuals. Ability to effectively present information and respond to questions from groups of managers, clients, customers, and the general public.

### **Mathematical Skills**

Ability to work with mathematical concepts such as probability and statistical inference. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

### **Reasoning Ability**

Ability to define problems, collect data, establish facts, and draw valid conclusions. Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables.

### **Competencies**

To perform the job successfully, an individual should demonstrate the following competencies:

Project and Change Management - Develops workable project plans; Coordinates projects; Communicates changes and progress; Completes projects on time and budget; Manages project team activities; Communicates changes effectively; Builds commitment and overcomes resistance; Prepares and supports those affected by change; Monitors transition and evaluates results.

Judgment - Displays willingness to make decisions; Exhibits sound and accurate judgment; Supports and explains reasoning for decisions; Includes appropriate people in decision-making process; Makes timely decisions; Develops strategies to achieve organizational goals.

Managing People - Includes staff in planning, decision-making, facilitating and process improvement; Takes responsibility for subordinates' activities; Makes self available to staff; Provides regular performance feedback; Develops subordinates' skills and encourages growth; Solicits and applies customer feedback (internal and external); Fosters quality focus in others; Improves processes, products and services; Continually works to improve supervisory skills.

Analytical - Synthesizes complex or diverse information; Collects and researches data; Uses intuition and experience to complement data; Designs work flows and procedures

Technical Skills - Assesses own strengths and weaknesses; Pursues training and development opportunities; Strives to continuously build knowledge and skills; Shares expertise with others.

Interpersonal Skills - Focuses on solving conflict, not blaming; Maintains confidentiality; Listens to others without interrupting; Keeps emotions under control; Remains open to others' ideas and tries new things.

Oral Communication - Speaks clearly and persuasively in positive or negative situations; Listens and gets clarification; Responds well to questions; Demonstrates group presentation skills; Participates in meetings.

Written Communication - Writes clearly and informatively; Edits work for spelling and grammar; Varies writing style to meet needs; Presents numerical data effectively; Able to read and interpret written information.

Teamwork - Balances team and individual responsibilities; Exhibits objectivity and openness to others' views; Gives and welcomes feedback; Contributes to building a positive team spirit; Puts success of team above own interests; Able to build morale and group commitments to goals and objectives; Supports everyone's efforts to succeed.

Safety and Security - Observes safety and security procedures; Determines appropriate action beyond guidelines; Reports potentially unsafe conditions; Uses equipment and materials properly.

Attendance/Punctuality - Is consistently at work and on time; Ensures work responsibilities are covered.

### **Certificates, Licenses, Registrations**

Must have a valid driver's license.

Must have a State of Georgia Librarian Certification.

### **Computer Skills**

To perform this job successfully an individual must be proficient in the use of Internet software, MS Outlook; Word; Excel and Access, as well as, skilled in using numbers to calculate payments and in the use of grammatical standards. Also, knowledge of Database software and Development software.

### **Other Skills and Abilities**

Excellent people skills, self-starter, ability to work independently and ability to multi-task. Extensive knowledge of departmental rules, regulations, procedures, and functions; Extensive knowledge of modern office practices, procedures, and equipment; Advanced knowledge in PC applications and PC operations; Ability to compose a variety of correspondence; Ability to prepare and maintain comprehensive records and reports; Ability to manage complex, large-scale projects; Ability to perform well under pressure; Ability to establish and maintain effective working relationships with supervisor, associates and the general public; In-depth understanding of library technology and user access issues; Thorough knowledge of public library principles, practices, procedures, and operations; Considerable knowledge of MARC formats for bibliographic data; Considerable knowledge of library automation systems and Familiarity with the Dewey Decimal System and Subject headings.

### **Other Qualifications**

Moderate travel is required.

**Physical Demands** The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this position, the employee is regularly required to talk or hear. The employee is frequently required to stand; walk; sit and use hands to finger, handle, or feel. The employee is occasionally required to reach with hands and arms; climb or balance; stoop, kneel, crouch, or crawl and taste or smell. The employee must frequently lift and/or move up to 10 pounds and occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

**Education and/or Experience**

Master's degree in Library or Information Science (M.L.S.) or equivalent from a program accredited by the American Library Association and four years of experience in library administration or project management; or four to ten years related experience and/or training.

Prefer strong public library experience, supervisory and project management experience and with experience using integrated library systems and experience in working with collaborative groups.

**Comments**

Note: This position description may not describe all duties, responsibilities and skills associated with this position. It is intended to portray the major aspects of the job. Other duties or skills may be required.