Overview of New and Improved Functionality in Workflows
Modules:
SirsiDynix Symphony 3.2 and Miscellaneous Updates

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LUC
October 11-12, 2007
We’ll Cover …

• SirsiDynix Symphony 3.2 ILS update
• EPS updates
• Web Staff Client
• Updates to Development Process:
  – Agile Process
  – Test Driven Design
What’s in a Name?

• SirsiDynix Symphony Versioning:
  – SirsiDynix Symphony 3.2 planned for release end of year
  – 3.2 Versioning selected to reduce confusion in entire customer base about code base for SirsiDynix Symphony
…And What’s in SirsiDynix Symphony 3.2

- Even more new features than GL3.1
- New/Updated Tools on SirsiDynix Symphony Site

Coming:
- New format for SirsiDynix Symphony/Horizon comparison
- SirsiDynix Symphony 3.2 Key Enhancements

- Highlights follow
Services to End Users

• **Delivery Service (aka Books by Mail):**
  - Serve your customers where they are!
  - Allows staff or end users to specify that they want items delivered to them at home or office.
  - Can be controlled by many parameters such as library, item type and patron type.
  - Includes cost recovery options for if you need to charge to cover expenses
  - Requires use of Demand Management
  - Bonus feature: patron labels can be used to print patron library cards
  - iBistro/iLink/Web2 ; EPS planned for future release
Services to End Users

• **Online User Registration:**
  Makes it easy to allow new customers to register for services and start using the library immediately.
  SirsiDynix Symphony 3.2 support for iBistro/iLink
  – Planned for future release of EPS
  – Customers can design their own forms to capture locally essential information
  – Records may be reviewed first; typical scenario if users ‘auto-registered’ that they have low privileges initially
  – “Word” list may be used to filter inappropriate language
  – SirsiDynix will not supply a default word list 😊
Online User Registration

First Name: 
Middle Initial: 
Last Name: 
Street: 
Apartment: 
City: 
State: 
Zip: 
Home Phone Number: 
Email address: 
PIN: 
Re-enter new PIN: 

Register  Clear
Services to End Users

• **Patron Credits:**
  Users can pre-pay fines and fees for library services.
### Credit User Account

**User ID:** 1000100000033  
**Profile name:** PUBLIC-G...

**Identify User**

**User ID:** 1000100000033

**Balance:** $51.60
**Date created:** 2/16/2007, 14:33
**Date last updated:** 9/17/2007, 9:02

**Amount:** $5.00
**Payment type:** CASH
**Credit reason:** DEPOSIT
**Credit Transa:** DEPOSIT
**Credit balance:** $51.60

<table>
<thead>
<tr>
<th>Date Created</th>
<th>Title</th>
<th>Item Id</th>
<th>Bill Reason</th>
<th>Credit Reason</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/17/2007, 9:02</td>
<td></td>
<td></td>
<td>DEPOSIT</td>
<td></td>
<td>$10.00</td>
</tr>
</tbody>
</table>
### Alerts Notes

**User ID:** 100010000033  
**Nelson, Bert**  
**Profile name:** PUBLIC-G...

#### Identify User

**User ID:** 100010000033

#### Total bills and payments

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Payment Type</th>
<th>Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total bills</td>
<td>1</td>
<td>4.60</td>
<td></td>
</tr>
<tr>
<td>Total owed</td>
<td>$4.60</td>
<td>CREDITACCT</td>
<td></td>
</tr>
<tr>
<td>Still owes</td>
<td>$4.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit balance</td>
<td>$51.60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Individual Bills and Payments

<table>
<thead>
<tr>
<th>Title</th>
<th>Item ID</th>
<th>Reason</th>
<th>Owes</th>
<th>Payment Type</th>
<th>Payment</th>
<th>Change</th>
<th>Billed</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>MISC</td>
<td>$4.60</td>
<td></td>
<td></td>
<td>CREDITACCT</td>
<td></td>
<td></td>
<td>$5.60</td>
<td>9/17/2007</td>
</tr>
</tbody>
</table>

---

**Done**

[Get User Information]  [Pay Bills]  [Pay More Bills]  [Make Payments for Another User]  [Close]
Services to End Users

• **Family/group/proxy circulation:**
  – Associate groups of patrons with each other and allow them to have access to each others’ holds, fines, etc.
  – Define access with granularity to ensure appropriate privacy among group members.
  – Define dependencies for delinquency – for example, a faculty member might **not** be delinquent due to a “proxy” borrower’s transgressions.
  – This capability also provides the option of grouping notices for the group.
  – Practical limit of around 200 members in a single group.
  – Just want to combine fines on checkin? Use “group checkin” a GL 3.1 feature.
### User Information

- **User ID:** 3111100295683
- **Profile Name:** PUBLIC

### Identify User

- **User ID:** 3111100295681

### Summary

- **Group Name:** SMITH-001
- **Responsibility Policy:** PARENT
- **Responsibility Level:** LINKED
- **Responsibility Type:** NONE
- **Number of Group Members:** 4
- **Date Created:** 1/11/2007

### User Group

- **Number of Group Members:** 4

<table>
<thead>
<tr>
<th>User Name</th>
<th>User ID</th>
<th>Notice Master</th>
<th>Status</th>
<th>Bills</th>
<th>Estimated Fines</th>
<th>Overdues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smith, Daniel</td>
<td>3111100295681</td>
<td>Y</td>
<td>DELINQUENT</td>
<td>2</td>
<td>$4.60</td>
<td>1</td>
</tr>
<tr>
<td>Smith, Lynn</td>
<td>3111100295673</td>
<td>N</td>
<td>DELINQUENT</td>
<td>2</td>
<td>$25.00</td>
<td></td>
</tr>
<tr>
<td>Smith, Francis</td>
<td>3111100295665</td>
<td>N</td>
<td>OK</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smith, John</td>
<td>3111100295632</td>
<td>N</td>
<td>DELINQUENT</td>
<td>2</td>
<td>$7.00</td>
<td></td>
</tr>
</tbody>
</table>
Services to End Users

• Consolidation of “My Account” features in iLink/iBistro:
  • End users may review their accounts and perform renewals and/or update hold information without moving to separate menu options.
• This feature already exists in EPS and Web2 and HIP
• Probably most popular Unicorn Enhancement Forum request--ever
# iBistro at SIRSI

## Your Electronic Library on the Web

### My Account

1 checkout | 1 hold | 1 request

### Checkouts/Select Items to Renew

<table>
<thead>
<tr>
<th>Renew</th>
<th>Title/Author</th>
<th>Times renewed</th>
<th>Due</th>
<th>You owe</th>
</tr>
</thead>
<tbody>
<tr>
<td>✅</td>
<td>Care for pets / American Veterinary Medical Association.</td>
<td>1</td>
<td>10/1/2007, 23:59</td>
<td></td>
</tr>
</tbody>
</table>

### Holds

<table>
<thead>
<tr>
<th>Cancel Title</th>
<th>Author</th>
<th>Availability</th>
<th>Pickup at</th>
<th>Expires</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rolf in the woods; the adventure of a boy scout with Indian Quonab and little dog Skookum. Over two hundred drawings</td>
<td>Seton, Ernest Thompson, 1860-1946.</td>
<td>Rockefeller University Library</td>
<td>Never expires</td>
</tr>
</tbody>
</table>

### Requests / Library messages

Go Back Help New Search My Profile Logout

---

[Powered by: SirsiDynix]

iBistro at ... Your Electronic Library on the Web
Copyright © 2000 - 2007, SirsiDynix
Services to End Users:

• **Language Field in Patron Record:**
  - A new field in the patron record may be used to record patron preferred language.
  - This field may be used to produce notices in the patron’s preferred language.
  - Removes the current need to establish language-specific patron profiles to accomplish language-based notification.
Services to End Users

- Multiple, active patron IDs:
  - For consortial situations in which the patron has a different ID at different institutions but otherwise shares patron record.
  - Any active ID may be used to call up patron record. Patron may also have multiple inactive IDs; inactive IDs will result in warning message.
Moving on to Staff
Staff Efficiencies

• Ordered Holds Fill:
  Completely control the order in which holds are filled from individual libraries or groups of libraries. Particularly appealing for consortia or libraries whose service locations cover a wide geographical range who want to keep down transit costs while maximizing the rate at which holds are filled. Requires use of Demand Management.
  – Most Unicorn sites using Demand Management will want to use this when they upgrade to SirsiDynix Symphony as it also allows truly random hold filling (even if the ordered fill component isn’t used)
  – Are you noticing that newer holds features are not available with traditional holds? You are not imagining this!
  – Another new option in SirsiDynix Symphony 3.2 will allow System Range holds to be changed to group or library if suitable copies exist and hold is placed from OPAC
Staff Efficiencies

• Updates to Bibload programs:
  – Utilities allowing load of bibliographic records (including bibload, 9xx suite, SmartPort, etc) have been updated to support multiple match points on numeric fields
  – Option to use CatKey for explicit matching
  – Ability to create holdings information during a single load even if holdings data is included in different MARC fields in the records in a given record load.
  – Delete handling options and subject field processing options also updated.
  – We encourage you to read documentation on new “delete” options carefully. Only use ‘actual’ delete if you know exactly what you are doing.
Staff Efficiencies

• 9xx Selection/Order Suite:
  – Updated to accommodate selection or order load files that include different accounts in the same file.
  – Improves efficiency by removing need for multiple loads
  – Addresses increasingly typical scenario in which Vendors require different accounts for different material types
  – Also accommodates library use of different accounts for greater granularity in accounting practices
  – “Bibload” improved matching updates also available
Staff efficiencies

• X.12 P.O. Call number updates:
  – Allows new option to define bibliographic call number hierarchy in outgoing x.12 order.
  – Previous option could only send “call number” record
  – Improves options for sites who have vendors perform most processing prior to shipment
**SirsiDynix Symphony WorkFlows**

**Schedule New Reports : Schedule Book K12 Orders**

- **Basic**
- **Vendor Selection**
- **Vendor Cycle Selection**
- **Order Selection**
- **Output Options**

**Count as a notice sent**

- **Holding Code**
  - Output Holding Code Info
  - Unicomp Holding Code Table
  - Vendor Holding Code Table
  - Use which Table: 

**Output Call Number**

- Retrieve call number from call number record
- Retrieve call number from bibliographic record:

- Include P.O. Note
- Include P.O. Orderline Note

**Schedule** | **Run Now (b)** | **Save As Template** | **Cancel**
Staff Efficiencies

• Additional scoping options on Acquisitions Fund Use:
  – Unicorn has long accommodated security levels on funds that control which operators could view, encumber or authorize expenditures on funds.
  – In SirsiDynix Symphony, additional security is available so that it is possible that given operators may be privileged to perform some or all functions on funds, but use of funds may be limited to orders for individual libraries or groups of libraries.
  – In a centralized ordering situation, this ensures that the correct funds are used for ordering/invoicing of materials for designated libraries.
FAQs: Understanding Fund Library Authorization

What is fund library authorization?

Fund library authorization provides a means to limit fund cycle purchasing to a library or list of libraries. A fund cycle can be used to purchase materials for a library only when the fund cycle is authorized in the fund cycle.

If a fund cycle is authorized for purchases for libraries A and B, it is not valid to pair the fund cycle with a holding code for library C. The fund cycle can only be paired with holding codes for libraries A and B.

What policy do I need to define to use fund library authorization?

The Fund Library Authorization policy in Acquisition Configuration defines the libraries for which a fund cycle can be used to order materials based on whether the holding code is defined.

The specified libraries in a Fund Library Authorization policy are compared to the libraries of the holding codes to determine if the fund cycle is permitted to be used to order materials for a library. If a fund cycle or fund cycles can be used to order materials for only one library, or for multiple libraries, a Fund Library Authorization policy must be defined for every unique combination of libraries. At least one library must be specified in the Libraries field when creating a Fund Library Authorization policy. An empty Libraries field in the policy is invalid.

A Fund Library Authorization policy is not required to be defined for all libraries; an empty Library Authorization field in the fund cycle record indicates that the fund cycle is authorized for all libraries.

Where is a fund library authorization defined?

The Library Authorization field is in the fund cycle record. You can select a Fund Library Authorization policy to define the libraries for which the fund cycle is authorized.
Staff Efficiencies

• Option to limit authorization to “Place Order”:
  – A new property may be used to control the ability to set the “date ready” on all order types
Add basic order for materials which will become part of the library's collection.
Staff Efficiencies

• **Support for Taxes in Acquisitions:**
  – Tax policies may be established
  – Taxes may be calculated automatically or manually entered and charged to appropriate funds on invoicing.
### Invoice Details

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invoice ID</td>
<td>234WW</td>
</tr>
<tr>
<td>Vendor ID</td>
<td>MIRA</td>
</tr>
<tr>
<td>Control number</td>
<td>775</td>
</tr>
<tr>
<td>Created in fiscal cycle</td>
<td>2006</td>
</tr>
<tr>
<td>Date invoiced</td>
<td>1/12/2007</td>
</tr>
<tr>
<td>Date ready</td>
<td>NEVER</td>
</tr>
<tr>
<td>Date locked</td>
<td>NEVER</td>
</tr>
<tr>
<td>Tax Structure</td>
<td>QUEBEC</td>
</tr>
<tr>
<td>Tax calculated</td>
<td>Y</td>
</tr>
<tr>
<td>Native subtotal</td>
<td>$458.56</td>
</tr>
<tr>
<td>Subtotal</td>
<td>$458.56</td>
</tr>
<tr>
<td>Native tax total</td>
<td>$2.30</td>
</tr>
<tr>
<td>Tax total</td>
<td>$2.30</td>
</tr>
<tr>
<td>Native tax total GST</td>
<td>$2.30</td>
</tr>
<tr>
<td>Tax total GST</td>
<td>$2.30</td>
</tr>
<tr>
<td>Native tax total QST</td>
<td>$0.00</td>
</tr>
<tr>
<td>Tax total QST</td>
<td>$0.00</td>
</tr>
</tbody>
</table>

### Native Subtotal Details
- Native subtotal amount paid: $0.00
- Subtotal amount paid: $0.00

### Tax Details
- Native tax total amount paid: $0.00
- Subtotal amount paid: $0.00
- Native tax total amount paid GST: $0.00
- Tax total amount paid GST: $0.00
- Native tax total amount paid QST: $0.00
- Tax total amount paid QST: $0.00

### Audit Trail
- No audit trail information available.
Staff Efficiencies

• Acquisitions:
  – Many updates to reduce steps
  – Many new properties to better customize workflows
  – Holding code search helper useful for libraries with hundreds of holding codes
### Table: Library Catalogue

<table>
<thead>
<tr>
<th>Name</th>
<th>Code</th>
<th>Library</th>
<th>Location</th>
<th>Item type</th>
<th>Item category 1</th>
<th>Item category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>BWIMAIN</td>
<td>BWIMAIN</td>
<td>MAIN</td>
<td>LIB_OFFICE</td>
<td>BWIERBOOK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEFAULT</td>
<td>DEFAULT</td>
<td>MAIN</td>
<td>STACKS</td>
<td>UNKNOWN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAINBOOK</td>
<td>MAINBOOK</td>
<td>MAIN</td>
<td>STACKS</td>
<td>BOOK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAINEBK</td>
<td>MAINEBK</td>
<td>MAIN</td>
<td>LIB_OFFICE</td>
<td>E-TEXT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAINREF</td>
<td>MAINREF</td>
<td>MAIN</td>
<td>REFERENCE</td>
<td>REF-BOOK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAINSER</td>
<td>MAINSER</td>
<td>MAIN</td>
<td>SERIALS</td>
<td>SERIAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNK</td>
<td>UNK</td>
<td>MAIN</td>
<td>UNKNOWN</td>
<td>UNKNOWN</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Controls
- Library: MAIN
- Item type: 
- Location: 

### Buttons
- OK
- Cancel

### Other Elements
- Description: Art
- Title Info
- Ordering
- Add Basic Order: Add Basic Order PO-343; 2007: MAIN; BT
- Add Basic Order: Enter Fundings and Distributions: PO-343; 2007: MAIN; BT
Staff Efficiencies

• Serials:
  – Use of CONSER information to create Serial Patterns:
    • Pattern suggestion capabilities have been updated to allow use of CONSER data embedded in bibliographic records to be used to create new patterns
  – Many new “enumeration friendly” sort options
FAQs: Mapping the 891 Tag (CONSER Captions and Patterns Tag) in Unicorn

The purpose of the CONSER (Cooperative Online Serials Patterns and Holdings Project is to develop a "universal" holdings record for as many serial titles as possible, beginning with current publications. For MARC 21 records, the 891 tag is used to store the standardized caption and pattern information for these holdings records.

Table of 891 tag to Unicorn serial pattern values
891 tag values
Be aware of the frequent fixed field in the 008
Creating serial control for records with an 891 tag

Table of 891 to Unicorn Serial Pattern Values

<table>
<thead>
<tr>
<th>891 Subfields</th>
<th>Unicorn Serial Control Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>a – First level of enumeration (M)</td>
<td>Level 1 enumeration</td>
</tr>
<tr>
<td>b – Second level of enumeration (NR)</td>
<td>Level 2 enumeration</td>
</tr>
<tr>
<td>c – Third level of enumeration (NR)</td>
<td>Level 3 enumeration</td>
</tr>
<tr>
<td>d – Fourth level of enumeration (NR)</td>
<td>Level 4 enumeration</td>
</tr>
<tr>
<td>e – Fifth level of enumeration (NR)</td>
<td>Level 5 enumeration</td>
</tr>
<tr>
<td>f – Sixth level of enumeration (NR)</td>
<td>Level 6 enumeration</td>
</tr>
<tr>
<td>g – Alternative numbering scheme, first level of enumeration (NR)</td>
<td>No equivalent in Unicorn serial patterns</td>
</tr>
<tr>
<td>h – Alternative numbering scheme, second level of enumeration (NR)</td>
<td>No equivalent in Unicorn serial patterns</td>
</tr>
<tr>
<td>i – First level of chronology (FA)</td>
<td>Chronology Type</td>
</tr>
<tr>
<td>j – Second level of chronology (NR)</td>
<td>Chronology Type</td>
</tr>
</tbody>
</table>
Other SirsiDynix Symphony 3.2 Highlights

- Materials Booking in Java Client
- Load options and additional holdings extract options in Serials
### Checkout Bookings

**User ID:** 1000100000033, Nelson, Berit

Profile name: PUBLIC-G...

#### Identify booking

<table>
<thead>
<tr>
<th>User ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000100000033</td>
</tr>
</tbody>
</table>

#### Change Booking Lookup Options

- **Pickup library:** ALL
- **Start date:**
- **End date:**

#### List of bookings, User ID: 1000100000033, Pickup library: ALL, 2 records

<table>
<thead>
<tr>
<th>Check Out</th>
<th>Title</th>
<th>Pickup Library</th>
<th>Item Library</th>
<th>Patron Booking Start...</th>
<th>Patron Booking Ends...</th>
<th>Start Preparation</th>
<th>Cleanup Ends</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Legally blonde</td>
<td>MAIN</td>
<td>MAIN</td>
<td>9/18/2007, 10:00</td>
<td>9/19/2007, 17:00</td>
<td>9/18/2007, 10:00</td>
<td>9/19/2007, 17:00</td>
</tr>
<tr>
<td></td>
<td>4 American</td>
<td>MAIN</td>
<td>AV_CENTER</td>
<td>10/8/2007, 10:00</td>
<td>10/10/2007, 17:00</td>
<td>10/8/2007, 10:00</td>
<td>10/10/2007, 17:00</td>
</tr>
</tbody>
</table>

#### List of checkouts

<table>
<thead>
<tr>
<th>Title</th>
<th>Item ID</th>
<th>Date Due</th>
<th>Billed</th>
<th>Amount Paid Automatically</th>
<th>Type</th>
<th>Record Status</th>
</tr>
</thead>
</table>
Business Intelligence

• Web Reporter *optional* with SirsiDynix Symphony:
  – Web-based ad hoc query tool that allows you to develop detailed reports against your data or to take advantage of “pixel perfect” output if you want to customize your notices or other forms. Optional Purchase.
  – Requires embedded or full Oracle
  – First release will focus on tools allowing sites to generate ad hoc reports; not attempting to reproduce SirsiDynix Symphony standard reports in Web Reporter
  – Training and consulting services will be available
  – Will go to beta late in SirsiDynix Symphony beta cycle
Director’s Station

• General Updates:
  – Completing testing on use of Director’s Station for Unicode sites
  – MSSQL 2005 testing underway (MS has announced end of sales for MSSQL 2000)
MS Vista

- Will be supported for SirsiDynix Symphony 3.2
- Once Mac OSX: Leopard is released, we will probably provide a Vista compliant SirsiDynix Symphony 3.2 build
- Vista complicates security needs on install further
- For this and other reasons, we plan to offer a new install option for WorkFlows at or slightly after SirsiDynix Symphony 3.2 release: support for Install Shield “silent install” which will allow sites who wish to “push” initial or upgrade installations via other technologies than those supplied by SirsiDynix
EPS Highlights

• Version 2.2: released June 6
• Version 2.2-1: early fall; short cycle
  – Incorporation of AJAX to improve hitlist display time and perceived speed
  – Improvements for displaying titles with thousands of holdings
  – New options for sites with multiple Unicorn instances and/or multiple library systems to be accessed via Z39.50 then direct link to OPAC
  – Other new features: Chris Collier
• Version 2.3:
  – In planning
  – Emphasis on ‘consortial/group’ capabilities for content and federated search
  – Various additional OPAC features related to SirsiDynix Symphony 3.2
  – Projected Beta Date TBD
Web Clients

- Basic Circulation and Cataloging capabilities; geared toward K12
- Unicorn sites already asking for other “WorkFlows” functionality
- No need to load software on each staff workstation—server lives on Unicorn server or on separate server depending on scaling needs.
- Early Fall release expected
- Plans for incremental updates to meet needs of non-K12 sites who want simplified interfaces for circulation, cataloging, and possibly other modules
**Check Out**

- Name: Berry, Chris
- Patron ID: CHRISB
- Profile: STUDENT
- Status: DELINQUENT
- Checkouts: 3
- Holds: 1
- Grade: FEMALE
- Homeroom: KLUTHO
- Library: MAIN
- Note: 
- Overdue: 3
- Fines: $23.40

**Checkouts**

<table>
<thead>
<tr>
<th>Copy ID</th>
<th>Title</th>
<th>Call Number</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>32449000082900</td>
<td>White House years</td>
<td>E855 .K57(1770.2)</td>
<td>2/19/2007,23:59</td>
</tr>
<tr>
<td>50000000013622</td>
<td>Cat and dog</td>
<td>PZ10.3 .M628 CAT 196</td>
<td>2/19/2007,23:59</td>
</tr>
</tbody>
</table>

**Holds**

<table>
<thead>
<tr>
<th>Pos.</th>
<th>Title</th>
<th>Author</th>
<th>Placed</th>
<th>Expires</th>
<th>Pickup</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Harry Potter and the</td>
<td>Rowling, J. K.</td>
<td>7/20/2005</td>
<td>NEVER</td>
<td>MAIN</td>
<td></td>
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</tbody>
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Test Driven Design
SirsDynix Development & Quality Objectives

- Scrum Development – 2/3 week sprints
- Potentially shippable product end of each sprint
- Quality, Stability, and Performance – AT ALL TIMES

What is Quality? Stability? Performance?
What is Quality? Stability? Performance?

Where did we start using CARS?
What is Quality? Stability? Performance?

![Product Stability Report](image)

- Early attempt...
What is Quality? Stability? Performance?

- CARS – Continuous measurement
  - Visibility
  - Competition
Testing - Before and After at SirsiDynix

Implemented CARS late December 2006