# Banner & Luminis Web Tools For Helpdesk

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**Session ID 0661**

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## Session Rules of Etiquette

- **Please turn off your cell phone/pager**

- **If you must leave the session early, please do so as discreetly as possible**

- **Please avoid side conversation during the session**

- **Feel free to ask questions at any time!**

**Thank you for your cooperation!**

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## Session Agenda

- **Our Technology Infrastructure**

- **Purpose of Presentation**

- **Our Helpdesk and Support Dilemma**

- **Getting Data from Boracle & Luminis**

- **Putting the Pieces Together**

- **Results & Benefits**

- **Screenshots! (demo)**

**About Edison State College**

- Located in Southwest Florida, serving Lee, Charlotte, Collier, and Hendry counties

- Approximately full time enrollment of 18,000 students (7000 full time / 11,000 part time)

- Four year school offering 10 Baccalaureate, 34 AA and AS degrees, 14 certificate programs

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**Current Technology Infrastructure**

- Outsourced technology helpdesk (local support center on main campus staffed during business hours)

- Blackboard CE8 LMS (hosted off campus)
- Banner 8.x running on Solaris platform
- Luminis 4.2.1 running on Solaris platform
- SunOne Calendar/Email (talks to migrate to Google?)
- Internet/Intranet Web Servers running Linux (CentOS) / Apache / MySQL / PHP

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**Our Helpdesk and Support Dilemma**

- *ACCESSABILITY* –
  — Long hold times for helpdesk support – multiple apps to check
  — Escalation issues – no clear path to resolve account issues
  — Portal Admin GUI just didn't do it for us

- **PASSWORD RESETS!**
  — Main drive behind application.
  — Initially charged with creating self managed password reset
  — Script worked so well, rolled out to helpdesk
  — Wanted to provide an easy way to verify identify and process resets securely
  — 70% of all helpdesk calls (EXPENSIVE – we pay per ticket!)
  — Once a multi application process, now single screen

**Our Helpdesk and Support Dilemma (cont)**

- *SECURITY*
  —lack of helpdesk audit capability
  —Needed to remove VPN access, Banner access, and Portal admin (password reset) access

- *TRAINING*
  —High turnover at helpdesk
  —Record student enrollment led to employment of part time support personal to assist in admissions, financial aid, registration, advising, etc.
  —No time to train effectively on all Banner screens

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**Bringing It All Together**



Luminis LDAP / Luminis Database

Banner Oracle Database

Local (custom) Databases

PALMS Web Application
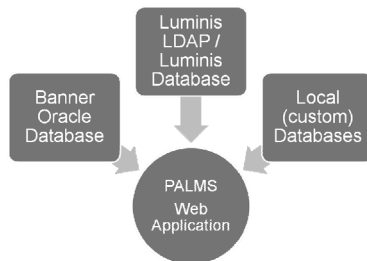
**Removed Helpdesk access to Banner & Luminis completely!**

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**Boracle Integration Details**

- Separate web server (Linux) running PHP 5+ with Oracle Instant Client libraries (why not JSP?)

- Queries made directly to Oracle database using custom written classes

- READ ONLY access to Oracle DB given to system user!
  - No writes to Oracle – select only

- Can execute any query or stored procedure
  — Pin resets / student holds / balance owed / etc..
  — only limit is your knowledge the database and SQL

## Boracle Query/Result Example

- **Display Financial Aid Holds**

```
$fa_hold_q = "select rtvhold_desc, TO_CHAR(rorhold_to_date, 'Mon ddth, YYYY') as
    HOLDTODATE,
    TO_CHAR(rorhold_from_date, 'Mon ddth, YYYY') as HOLDFROMDATE
    from rorhold, rtvhold ' . 'WHERE rorhold_hold_code = rtvhold_code and
    rorhold_pidm = :pidm AND rtvhold_info_access_ind = 'Y' AND rorhold_aidy_code =
    :yearcode ORDER BY rorhold_to_date DESC';

$fa_hold_r = Oracle::query($fa_hold_q, array(':yearcode'=>$_POST["fa_year"],
    ':pidm'=>$ACTIVE_BANNER_PERSON->getPidm()));

while ($fa_hold_d = $fa_hold_r->fetch())
{
    echo $fa_hold_d["RTVHOLD_DESC"];
    \\ ECHO OUT REST OF YOUR DATA HERE
}
```

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## Luminis / LDAP Integration Details

- Any cptool / configman / mbtool / or custom shell script can be easily executed from local or remote host using SSH

    — **NOTE:  Unix/Linux required for remote ssh commands!**

- Result can be customized in any manner

    — **example (from remote host):**

```
<?php
$class_crn = '11111';  //Normally posted in POST variable
$result = escapeshellcmd(shell_exec(ssh <insert portal host &
    credentials> 'cptool list students " . $class_crn . "'));
echo "<pre>" . $result . "</pre>";
?>
```

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## Benefits

- Helpdesk hold & assist times dramatically reduced

- Support staff training time reduced

- Empowered support staff to provide information outside their specific (banner) area
    —example: helpdesk could more efficiently troubleshoot admissions / account errors
    —example: Cashier's office could now quickly and easily check for financial aid disbursements

- What's Next?
    —cleanup banner classes (consolidate) to allow for multiple apps to consume (mobile, student)

## Screenshots

| Home | Banner Data ▾ | Portal Data ▾ | Mail Data ▾ | Portal Admin ▾ | Configuration ▾ | Logout |

| General Banner Info | General Portal Info | Manage Your Email Group(s) | Message Broker Events |
| Basic Re-Sync To Portal | Manage Password Reset Ability | Get Mailbox Info | View Logs |
| Portal myStatus Summary | Disable / Lock Account | Manage Mail Forward | View TA Details |
| Admissions Summary | Set/Restore Temp Password | Reconstruct Mailbox | Access Stats (GLOBAL) |
| Courses (Current & Future) | Reset Password | Backup Mailbox | Password Reset Stats |
| Course History (Past Terms) | Enable Locked Account | View Mail Logs | CPU Load Stats |
| Course Transfer History | Account Lock History | | Source ID -> User ID |
| Student Holds | Access Stats (USER) | | User ID -> Source ID |
| Financial Aid | Password Reset Stats (USER) | | TA Group Membership |
| Account Summary (Cashier) | Full LDAP Entry | | List Groups/Membership |
| Transcript Summary | | | List Session Count |
| Mailing Summary | | | Send Alert Message |
| Class Enrollment (CRN) | | | |

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## Screenshots (cont)

Banner General Person Info  - provides quick way for helpdesk to verify

Current User: Edisontest AAAA  |  UID: eaaaa  |  Banner ID: @00016900  |  Immutable ID: 458006140827577  |  PIDM: 36935    CLEAR USER

**Banner Data:**

| Full Name: Edisontest AAAA | Accepted AUP: Yes |
| Gender: M | Banner disabled? No - [history] [full PALMS history] |
| Banner Pin: | Can reset password? Yes - [history] |
| Email Address: eaaaa@edison.edu | |
| Date of Birth: Oct 13th, 1951 | |
| Address: 8099 College Pkwy SW, Fort Myers, FL, 33906 | *Emergency Contact Info:* |
| Phone #: (219) 4899307 | Name: Gillian AAAA |
| SSN: ***-**-9999 | Address: , , |
| Banner Question: edison | Phone: 239-4899360 |
| Banner Answer: edison | Last Updated: May 07th, 2007 |

version 2.4.0 - coco verde edition | about the palms system | report a problem | created and maintained by the web and unix guys at edison state college
this page was generated in 0.431 seconds | 8 queries executed in the process | your IP: _____ | 30 total action requests today
Oracle Server: (_____) LDAP Server: (venus.edison.edu) Mail Server: (mercury.edison.edu) Change Servers

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## Screenshots (cont)

### Basic Portal information allows helpdesk / users to troubleshoot

Current User: Edisontest AAAA  |  UID: eaaaa  |  Banner ID: @00016900  |  Immutable ID: 458006140827577  |  PIDM: 36935    CLEAR USER

**Basic LDAP Entry**

| mail: | eaaaa@edison.edu |
| cn: | Edisontest AAAA |
| mailhost: | mercury.edison.edu |
| uid: | 458006140827577 |
| alias: | eaaaa |
| mail foward: | |
| mail delivery: | mailbox |
| mail alternate(s): | |
| account status: | enabled |
| account created: | 05/07/2007 - 5:24pm (20070507124182Z) |
| credential expired: | false |
| last login (good): | 02/05/2010 - 9:31am (2010-02-05 14:31:00.0592Z) |
| last login (bad): | 02/05/2010 - 9:30am (2010-02-05 14:30:49.0971Z) |
| last passwd change: | 12/02/2009 - 12:09pm (2009-12-02 17:09:47.0389Z) |
| portal roles: | prospectivestudent |
| | applicantaccept |
| | student |

## Slide 16

**Screenshots (cont)**

- **Diagnose and view Targeted announcement details**

Current User: kdburkex AAAA | UID: xxxxx | Banner ID: 8000x4900 | Immutable ID: x5d90x/40927577 | PIDM: 34935    CLEAR USER

**Targeted Announcement Details**

Select Announcement: Aug 5 2009 TA_12462.log ▾  Last 50 Rows ▾  Submit

TA_12462.log

```
<?xml version="1.0" ?>
<TARGETED_ANNOUNCEMENT>
  <TA id="12462">
    <CREATOR>kxxxdxx1</CREATOR>
    <SUBJECT>test please ignore</SUBJECT>
    <TA_BODY>alt;pxgt;&amp;nbsp;&lt;/&gt;
alt;dir style=&quot;margin: 0px 0px 10px&quot;&gt;&lt;/&gt;
alt;dir style=&quot;margin: 0px 0px 10px&quot;&gt;&amp;nbsp;&lt;/&gt;
alt;dir style=&quot;margin: 0px 0px 10px&quot;&gt;&amp;nbsp;&amp;nbsp;&lt;/&gt;&lt;/TA_BODY&gt;
    <DELIVERY_OPTION>BY_PIPELINE</DELIVERY_OPTION>
    <DELIVERY_OPTION>GO_TO_FILE</DELIVERY_OPTION>
    <DELIVERY_STATUS>Success</DELIVERY_STATUS>
    <ATTACHED>
    <AFTRIBUTED>
    <CREATION_TIME>2009-08-05 09:04:42 PM EDT</CREATION_TIME>
    <DELIVERY_TIME>2009-08-05 09:31:11 PM EDT</DELIVERY_TIME>
    <EXPIRATION_DATE>2009-09-12</EXPIRATION_DATE>
    <RECIPIENT_COUNT GOLD_DELIVERY="FALSE">0</RECIPIENT_COUNT>
  </TA>
</TARGETED_ANNOUNCEMENT>
```

```
Begin logging...
2009-08-05 03:04:41 PM EDT  updating status: statusCode=Started, mNumTargets=0
Thread Count:201, Memory (Free/Total):455347516/1073026660
Logging verbosely for Targeted Announcement 12462 set to true
*********
*** 0 SMS
*** ... means delivery will be via the the
*** ... Personal Announcement Channel (PAC)
*** 2 EMail
*** ... means delivery will be via email
*** In both cases, database writes are batched in groups of 100
*********
2009-08-05 03:04:41 PM EDT  ---> MESSAGE 12.442: 0 targeted, 0 ABM recipients, 0 ABM delivered
Thread Count:201, Memory (Free/Total):461800726/1073026660
2009-08-05 03:04:41 PM EDT  ---> MESSAGE 12.442: 0 targeted, 0 email recipients, 0 email delivered, 0 ABM recipients, 0 ABM delivered
Thread Count:201, Memory (Free/Total):461390720/1073026660
2009-08-05 03:04:41 PM EDT  updating status: statusCode=Success, mNumTargets=0
Thread Count:201, Memory (Free/Total):461745320/1073026660
Fixing and closing file
```

## Slide 17

**Questions / Discussion?**

**All source code and documentation available at**
*http://mark.edison.edu/palms*

## Slide 18

**Thank You!**

| Mark Savage | Daniel Ramos |
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**All source code and documentation available at**
*http://mark.edison.edu/palms*

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