

Oracle Applications Release 11i Newsletter

The contents of this newsletter were contributed by **Solution Beacon** consultants who have accumulated extensive experience during the numerous installations, implementations, and upgrades of Release 11i that we have performed for our clients. We also welcome your participation in this newsletter. If you would like to contribute on any Release 11i topic, please send your contact information, topic, and a short abstract to mweiss@solutionbeacon.com. We would also appreciate any feedback from our readers if you have successfully or unsuccessfully implemented one of the suggestions from any of the newsletters. Comments or suggestions are always appreciated. Please send to mweiss@solutionbeacon.com.

Mary Lou Weiss, Alicia Hoekstra, and Randy Giefer, Editors, Solution Beacon

Training and Seminars

Solution Beacon does a lot of training, seminars and workshops that could give you that extra information you need about the latest in the Oracle Applications marketplace. We will be sending out emails periodically to let you know about these in the future. If you would like to receive this information please send an email to newsletter@solutionbeacon.net and we'll include you on our information list for future events. You will not be added to the list unless you opt in for additional notifications – we all get enough “junk” mail. ☺

Ask the SB Experts

Question: I see that there is a section in your September/October newsletter regarding Differences between 11.5.10 and 11.5.9 regarding *i*Payment. We are currently on 11.5.8. Would the difference be the same?

Answer: The way *i*Payment works in 11.5.8 is different in 11.5.9 and 11.5.10. Release 11.5.8, with the standard maintenance pack applied, is on patchset M while *i*Payment on Release 11.5.9 with the standard maintenance pack applied on patchset O. The most current patchset is P. In Release 11.5.8, *i*Payment uses the jtf framework while in Releases 11.5.9 and 11.5.10 the self service framework is utilized. Even with the above difference in Release 11.5.8 and 11.5.9/11.5.10 environments, Release 11.5.8 *i*Payment should work with Verisign BEP servlet version 3.2. Release 11.5.8 will use jdk 1.3.x. It is much easier to implement *i*Payment in 11.5.9+ environment. The challenges mentioned here come into picture when you are trying to integrate Verisign servlet with *i*Payment module.

Question: I understand that Oracle Alerts will be de-supported in future and Workflow will replace it. However, I could not find a document to support this. Can you please help?

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Real Solutions for the Real World ®

Answer: De-support regarding Oracle Alerts is a misnomer – there will be no further enhancements to Oracle Alert as Workflow and business events are where Oracle is putting forth their efforts. This approach will be good through R12 and is, as always, subject to change.

It is uncertain what will happen in the Fusion Applications, although it looks like BPEL will be the next generation of Workflow products.

Question: The Sept/Oct newsletter (vol 34) has a question/answer regarding upgrading to 11.5.10. One of the comments made is a blanket statement that 'you'll need to double your hardware' to go to 11.5.10.2. Could you elaborate more on this? What is your recommendation for a standard applications server? I currently support an instance running 11.5.8 and one running 11.5.9 and we've not had to upgrade hardware to get to these releases.

Answer: Release 11.5.10.2 introduces a brand new J2EE compliant Java Framework (5.10), a new Java release (1.4), a new Java Workflow (2.6.3), a new XML Publisher, the new JInitiator 1.3 and RDBMS Version 9.2.0.6 at the database. Effectively, all of the underlying technology (forms, java) and pseudo technology components (workflow, framework, xml) have been updated to more current version.

As you probably already know, Java is very CPU intensive and with 11.5.10.2 approximately 30% larger from the code set (most of it in Java) than 11.5.9, the applications footprint has increased dramatically with a corresponding increase in the amount of horsepower and memory required.

Also, there are now 209 modules in 11.5.10 and all modules are installed at the OS and database regardless of licensing at the OS and database levels as you also know. Oracle is also continuing to denormalize the database to optimize database reporting (i.e. DBI). Database growth is significant in 11.5.10.2+ especially in the background workflow tables.

Release 11.5.10.2 does not have the latest Financials, Projects or HR Family Packs installed at a minimum which is critical if you are using these modules or are upgrading or implementing. All of the new family packs are heavily laden with new/changed Java features and functionality. Run patchsets.sh against your environment to determine which of the family packs will impact you (even after upgrading to 11.5.10.2) and review the readme documents for the applicable family pack and review all of the java features that have been added. All of this new "java" contributes to load the server regardless of user use.

As Oracle increases the java footprint of the applications, there is also a corresponding increase in the amount of memory consumed by the Apache server. We are now recommending 4x the number of CPUs for RAM due to the memory leaks well-known with this version of Apache (which is the only version we are certified to use with the E-Business Applications).

Our blanket recommendation is, as you probably figured out, is made for PEAK processing periods. We contend that average CPU loads mean nothing in an Oracle Applications environment due to the business use of the modules being fairly low most of the time but incredibly intense at other times (month-end, payroll, etc). You can spend an inordinate amount

of time fine-tuning an Applications environment only to have to redo that tuning exercise every time a mandatory quarterly security patch or other critical patch impacts your configuration.

The Senior Consultants at Solution Beacon, LLC

V\$Datafile Reporting Changes Following a Release 11.5.10 Upgrade

In our Release 11.5.9 instance all partitions had logging set to Yes and in our upgraded Release 11.5.10 instance there were two set with NO. We noticed that WF_LOCAL_USER_ROLES has two no logging partitions. The E-Business Suite 11i uses nologging in certain cases to enhance performance. However, if you want to override this behavior, you can set your database to use force logging with "alter database force logging". See MetaLink Note:216211.1 "Nologging in the E-Business Suite". Once we altered the two non-logging partitions of the table to logging, we have not had any additional issues.

Jeffrey Beckstrom, for Greater Cleveland Regional Transit Authority

Using 11i Rapid Clone

Introduction

This document is based on MetaLink note 230672.1, Cloning Oracle Applications Release 11i with Rapid Clone. The MetaLink note includes procedures for both new clones and refreshes. Most of the clones performed at your company will be refreshes...and probably most of those will be database refreshes as opposed to a full refresh of both the database and the application code.

Recommendations for Use of 11i Rapid Clone at Your Company

Section 1 of the cloning document (MetaLink note 230672.1) describes the pre-requisites for using rapid clone. This section should be reviewed periodically to see if new rapid clone patches or revised procedures have been added to the document. Ensure that the new patches are tested and then applied to the production environment. Then, if applicable, utilize revised procedures.

Sections 2 and 3 should be followed if a complete clone is desired. For example, sections 2 and 3 would be used if a new test environment were needed on one of the test UNIX boxes. However, note that in section 2, step 3a (configure the target system database server) the steps in appendix B would be used if your company will be refreshing from a hot backup rather than a cold backup. Why? Cloning from a hot backup requires manual intervention and is not handled by the perl script in section 2, step 3a. Specifically, use of a hot backup for creation of

the database requires application of archive log files that were created while the hot backup was created on the source system. If your company will be refreshing from a cold backup, section 2, step 3a can be followed.

Most likely step 1 of section 4 (refreshing a target system) will be used with the greatest frequency at your company. However, note that in step 1 c (configure the target system) the steps in appendix B would be used if your company is using a hot backup as the source of the database. If a cold backup is used, step 1c can be followed.

Appendix B Explanation

If a hot backup is chosen, as stated above, Appendix B would be followed. The following is a listing of the Appendix B steps with expanded instructions for using a hot backup as the source of the database:

- Log on to the target system as the ORACLE user
- Configure the <RDBMS ORACLE_HOME>
 - `cd <RDBMS ORACLE_HOME>/appsutil/clone/bin`
 - `perl adcfgclone.pl dbTechStack`
- **Create the target database control files manually**
- **Start the target system database in open mode**
- Run the library update script against the database

```
cd <RDBMS ORACLE_HOME>/appsutil/install/<CONTEXT NAME>

sqlplus "/ as sysdba" @adupdlib.sql <libext>
where <libext> is "sl" for HP-UX, "so" for any other UNIX platform and not required
for Windows.
```
- Configure the target database (the database must be open)

```
cd <RDBMS ORACLE_HOME>/appsutil/clone/bin

perl adcfgclone.pl dbconfig <target context file>
where target context file is:

<RDBMS ORACLE_HOME>/appsutil/<Target CONTEXT_NAME>.xml
```

Note the third and fourth bullet points. At your company these points will be accomplished as follows:

1. on the source database server, execute:

```
alter database backup controlfile to trace;
```

2. on the source database server, create an online or hot backup; create a report that lists the archive log files that were created during the hot backup
3. on the target, delete the database files
4. on the target, ftp the hot backup files to the database file subdirectory
5. on the target, ftp the relevant archive log files from the source database
6. on the target, ftp the create control file script created in step 1
7. modify the create control file script as follows:
 - a. remove all lines before the startup nomount statement
 - b. change the REUSE to SET
 - c. change the SOURCEDB to the NEWDB where NEWDB would be the name of the new SID—which probably won't be NEWDB
 - d. change NORESETLOGS TO RESETLOGS
 - e. delete all lines after the CHARACTER SET designation
 - f. below is a general example of an altered file

```
CREATE CONTROLFILE SET DATABASE "NEWDB" NORESETLOGS ARCHIVELOG
...
LOGFILE
GROUP 1 '/disk1/log1.dbf' SIZE 50M,
...
DATAFILE
'/disk2/system01.dbf',
'/disk3/rbs01.dbf',
...
'/diskN/last_file01.dbf'
CHARACTER SET WE8ISO8859P1;
```

8. On the target system, modify the init.ora to reflect the correct sid and location of the control files; also, ensure the init.ora parms are set for archive log mode
9. On the target system, run the create control file sql you created and modified per the above instructions; this sql will start the database but not open it
10. After the database starts, Then, execute:

```
RECOVER DATABASE USING BACKUP CONTROLFILE UNTIL CANCEL;
```

11. refer to the archive log reports that were created on the source when the hot backup script ran; these reports will help you determine the archive logs that were created during the hotbackup – you will be prompted for the first archive log; the number in the prompted name will help you match it to the files brought over; the last archive log to be applied would be determined from the report
12. After the last archive (created during the hot backup) is applied, type cancel: The screen would like this—including the cancel you've typed:

```
Specify log: {<RET>=suggested | filename | AUTO | CANCEL}  
cancel  
Media recovery cancelled.
```
13. If you don't see an error indicating that another archive log needs to be applied, you can proceed; If you do see an error, you are not done applying archive logs and must apply another
14. After the last, necessary archive log has been applied, issue:

```
alter database open resetlogs;
```
15. Add temp files; the statement to do this was in the end portion deleted when creating the create control file sql in step 7
16. take the database out of archive log mode is so desired

Continue on with the remaining bullet points in Appendix B to finish the clone.

Kevin Dahl, Solution Beacon

AR Configuration and iPayment

Problem Description:

You are seeing ERROR IBY-204704 when you try to submit Automatic Receipts Creation Program and credit card is not getting validated. In the output file you are seeing the exception error:

```
Authorization of Credit Card transaction Failed.Mandatory input  
field missing for OapfPmtInstrExp [],[].
```

In the logfile you are seeing this error

```
arziex: 1 AR_CC_AUTH_FAILED exceptions inserted
```



You are able to do authorization and capture process through IPayment UI module itself. You have verisign BEP servlet version 3.3 and Oracle Application Version 11.5.10 and AR is on family pack N.

Solution

The main reason why you are getting this problem is that one of the credit card does not have expiration date defined in setup. To address this issue, the first thing to do is to verify the issue is applicable.

1. From the Output file check the name of Customer. In this case it is **3M ESPE**.

Outfile

```
XXX PRODUCTS INC                               Automatic Receipts Execution Report
Report Date: 08-NOV-2005 19:48
Batch Name: 1029                                For Creation/Approval
Page:      1 of      2
```

```
XXX PRODUCTS INC                               Automatic Receipts Execution Report
Report Date: 08-NOV-2005 19:48
Batch Name: 1029                                For Creation/Approval
Page:      2 of      2
```

```
----- Paying Customer -----
Name          Number          Location          Bank Name          Invoice
Number    Due Date    Exception
-----
3M ESPE          985953          IRVINE 2111          3M ESPE          571006
06-NOV-05
```

Authorization of credit card transaction failed. Mandatory input field missing for OapfPmtInstrExp[],[]

2. If you are getting the same error execute the following query:

```
sqlplus apps/apps
select BANK_ACCOUNT_NUM, bank_account_id,inactive_date from
ap_bank_accounts_all where bank_account_name='3M ESPE';
```

```
BANK_ACCOUNT_NUM          BANK_ACCOUNT_ID  INACTIVE_
-----
4012888888881881          227616
4111111111111111          227617  30-NOV-05
4012888888881881          227618  31-DEC-06
```

From the bank form, you can not update the data – you will need to delete the bad data from the table itself.

```
SQL> select BANK_ACCOUNT_NUM, bank_account_id,inactive_date from
ap_bank_accounts_all where bank_account_name='3M ESPE';
```

```
BANK_ACCOUNT_NUM          BANK_ACCOUNT_ID  INACTIVE_
-----
```

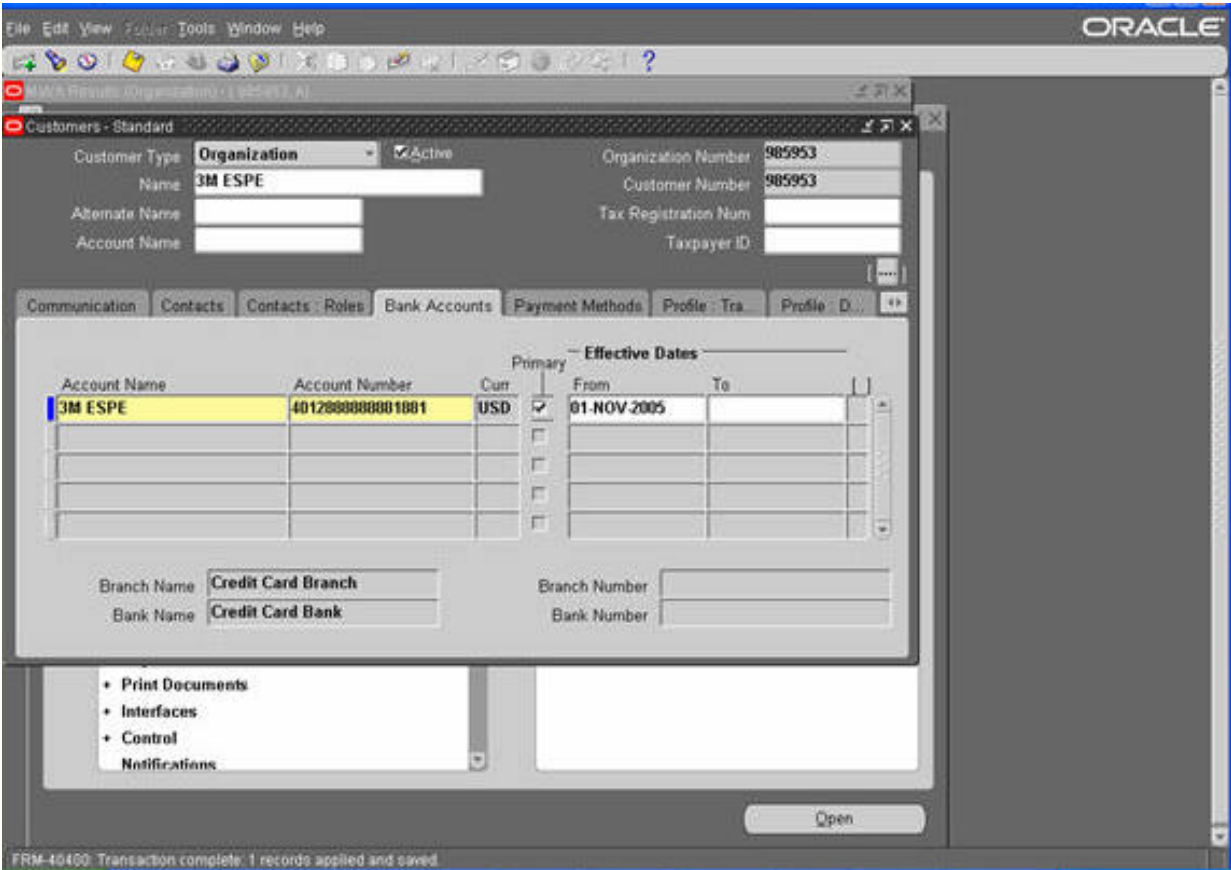
401288888881881
4111111111111111
401288888881881

227616 ← **Bad Record**
227617 30-NOV-05
227618 31-DEC-06

DELETE THE BAD RECORD

```
SQL> delete from ap_bank_accounts_all  
where BANK_ACCOUNT_ID=227616;  
SQL> commit;  
Commit complete.
```

Attach one account number in customer using the standard form shown below and make it primary. If you do not want to make it primary, you can unselect the option.



The screenshot shows the Oracle Financials 'Customers - Standard' form. The customer is '3M ESPE' (Organization Number 985953). The 'Bank Accounts' tab is active, displaying a table of bank accounts. The first row is highlighted, showing account number 401288888881881, currency USD, and marked as primary with an effective date of 01-NOV-2005. Below the table, there are fields for Branch Name (Credit Card Branch) and Bank Name (Credit Card Bank). A status bar at the bottom indicates 'FRM-40400: Transaction complete: 1 records applied and saved.'

Account Name	Account Number	Curr	Primary	Effective Dates
3M ESPE	401288888881881	USD	<input checked="" type="checkbox"/>	From: 01-NOV-2005 To:
			<input type="checkbox"/>	
			<input type="checkbox"/>	
			<input type="checkbox"/>	

Try the test again. The problem should be resolved.

Vivek Awasthi, Solution Beacon

Got Workflow?

Solution Beacon will be offering a new training class starting in FY'06 on using Oracle Workflow. Karen Brownfield, well renowned in the Oracle community, will be conducting this instructor led training coupled with "Real World" usage. The course will cover the fundamentals of Workflow including: setups, monitoring, tools and maintenance.

Course attendees will gain practical knowledge in how to create, modify and automate business processes using Oracle Work Flow within the E-Business suite. We are targeting our first class to take place in beautiful Atlanta GA sometime in February. Be on the look out for the announcement in the next issue of dates, locations and times. Classes will fill quickly and will be limited to a maximum of 12 students.

Reserve your spot today by contacting Solution Beacon at 206.366.6606 or toll free 888-603-9243.

John Nicholson, Solution Beacon

NAS vs SAN

A Review of NAS

Solution Beacon personnel see a wide variety of disk storage configurations at multiple customer sites. Generally, that variety can be broken down into the following models:

- Network Attached Storage (NAS)
- Storage Area Networks (SAN)

This article reviews the definitions for both of the above and recommends actions to optimize NAS in an Oracle database environment.

www.webopedia.com provides the following definition for NAS:

A network-attached storage (NAS) device is a server that is dedicated to nothing more than file sharing. NAS does not provide any of the activities that a server in a server-centric system typically provides, such as e-mail, authentication or file management. NAS allows more hard disk storage space to be added to a network that already utilizes servers without shutting them down for maintenance and upgrades. With a NAS device, storage is not an integral part of the server. Instead, in this storage-centric design, the server still handles all of the processing of data but a NAS device delivers the data to the user. A NAS device does not need to be located within the server but can exist anywhere in a LAN and can be made up of multiple networked NAS devices.

www.pcmag.com further clarifies the definition of NAS with the following:

Network Attached Storage is a specialized file server that connects to the network. A NAS device contains a slimmed-down (microkernel) operating system and file system and processes only I/O requests by supporting popular file sharing protocols such as NFS (UNIX) and SMB/CIFS (DOS/Windows). Using traditional LAN protocols such as Ethernet and TCP/IP, the NAS enables additional storage to be quickly added by plugging it into a network hub or switch. As network transmission rates have increased from Ethernet to Fast Ethernet to Gigabit Ethernet, NAS devices have come up to speed parity with direct attached storage devices. General-purpose computers with a full-blown operating system such as Windows or UNIX are sometimes labeled as NAS products, but the true NAS is built from scratch as a dedicated file I/O device.

www.webopedia.com provides the following definition for SAN:

A Storage Area Network (SAN) is a high-speed subnetwork of shared storage devices. A storage device is a machine that contains nothing but a disk or disks for storing data. A SAN's architecture works in a way that makes all storage devices available to all servers on a LAN or WAN. As more storage devices are added to a SAN, they too will be accessible from any server in the larger network. In this case, the server merely acts as a pathway between the end user and the stored data. Because stored data does not reside directly on any of a network's servers, server power is utilized for business applications, and network capacity is released to the end user.

www.pcmag.com further clarifies the definition of SAN with the following:

Storage Area Network is a network of storage disks. In large enterprises, a SAN connects multiple servers to a centralized pool of disk storage. Compared to managing hundreds of servers, each with their own disks, SANs improve system administration. By treating all the company's storage as a single resource, disk maintenance and routine backups are easier to schedule and control. In some SANs, the disks themselves can copy data to other disks for backup without any processing overhead at the host computers. The SAN network allows data transfers between computers and disks at the same high peripheral channel speeds as when they are directly attached. Fibre Channel is a driving force with SANs and is typically used to encapsulate SCSI commands. SSA and ESCON channels are also supported. A centralized SAN connects multiple servers to a collection of disks, whereas a distributed SAN typically uses one or more Fibre Channel or SCSI switches to connect nodes within buildings or campuses. For long distances, SAN traffic is transferred over ATM, SONET or dark fiber. To guarantee complete recovery in a disaster, dual, redundant SANs are deployed, one a mirror of the other and each in separate locations.

These two types of disk systems (NAS vs. SAN) operate differently. The SAN is channel-attached whereas the NAS is another node on the network—using protocols just like any other node on the network. That difference lies at the heart of their respective disk performance. Typically a SAN will perform well because it is channel attached with a high speed connector

such as fiber. A NAS may not perform optimally for database applications if it is configured as a NAS and the supporting operating system is not optimal for NAS and database applications.

So, how can NAS be optimized for Oracle database applications? The following are options for improving the performance of a NAS

- Make it more like a SAN. One option is to direct connect the NAS via fiber just as a SAN would be connected. You must ensure the vendor permits this option
- Ensure the optimal operating system version is used on the database server. Glenn Colaco, formerly with SUN, and now with Network Appliance and Darrell Suggs of Network Appliance produced an excellent white paper on NAS and Oracle databases: "Database Performance with NAS: Optimizing Oracle on NFS". This paper is a collaborative effort between them. In this paper they point out that Solaris 9, as opposed to Solaris 8, must be used to take advantage of enhancements that permit faster I/O to dedicate the NAS to the application. If it makes sense from a cost/benefit analysis, don't share the NAS with multiple applications. Instead, dedicate the NAS to just that application

Kevin Dahl, Solution Beacon

OAUG Events in the News

Session selection is underway NOW for COLLABORATE 06: Technology and Applications Forum for the Oracle Community. Mark your calendar to attend!

April 23 - 27, 2006
Gaylord Opryland Resort
Nashville, Tennessee, USA

The Oracle Applications Users Group (OAUG) invites the family of Oracle Applications users to share its ideas, innovations and solutions during COLLABORATE 06: Technology and Applications Forum for the Oracle Community (previously the OAUG Connection Point conference).

In 2006, the Independent Oracle Users Group (IOUG) (formerly International Oracle Users Group), the Oracle Applications Users Group (OAUG), and Quest International Users Group (Quest) are leveraging their collective strengths to host a leading technology and applications forum for the Oracle community. This event will deliver the same exceptional content you've come to expect from the OAUG Connection Point conference each year.

For more information, visit the OAUG COLLABORATE 06 conference Web site at www.oaug.org/conferences/2006/collaborate06/.



OAUG Incorporates PeopleSoft Special Interest Groups into Organization

The OAUG announced recently that four user groups formerly associated with PeopleSoft have been incorporated into the OAUG as Special Interest Groups (SIGs).

These groups include the PeopleSoft Accounts Payable (PSAP) SIG, the PeopleSoft Credit & Accounts Receivable Experts (PSCARE) SIG, the PeopleSoft Healthcare Industry User Group and the PeopleSoft CRM User Group.

Other organizations affiliated with companies that have recently merged with Oracle are encouraged to contact Steven Hughes, executive director of the OAUG, to discuss ways to play a bigger role within the OAUG. Hughes can be reached at shughes@oaug.com.

For more information on the OAUG, please visit www.oaug.org.

Robin Dahlen for Meeting Expectations

Upcoming Solution Beacon Events

EVENT	DATE	LOCATION
The Road to Nashville sm Workshops	January 19, 2006	Los Angeles, CA
NorCal Training Days, <i>Secrets of the Account Generator</i> , Karen Brownfield, Solution Beacon, LLC	January 24, 2006	San Ramon, CA
NorCal Training Days, <i>TCA, Often Misunderstood and Under Utilized</i> , Paul Cyphers, Solution Beacon, LLC	January 24, 2006	San Ramon, CA
RMOUG Conference	February 15-16, 2006	Denver, CO
The Road to Nashville sm Workshops	February 23, 2006	San Ramon, CA
The Road to Nashville sm Workshops	March 3, 2006	Boston, MA
The Road to Nashville sm Workshops	March 17, 2006	Atlanta, GA
The Road to Nashville sm Workshops	March 31, 2006	Dallas, TX
COLLABORATE 06: Technology and Applications Forum for the Oracle Community	April 23-27, 2006	Nashville, TN

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