

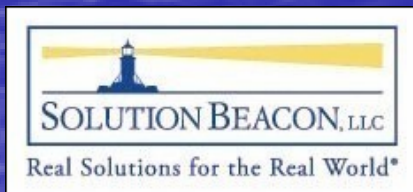


Oracle E-Business Suite Release 11i AutoConfig and RapidClone

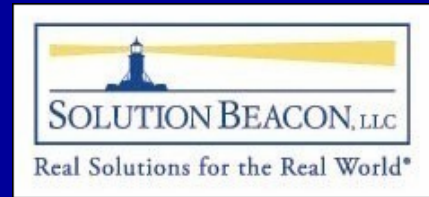
Brian Bent
Applications DBA
authored by James Morrow

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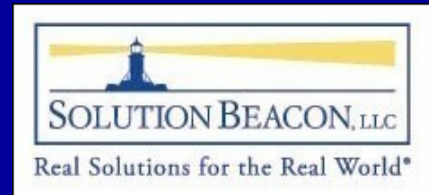
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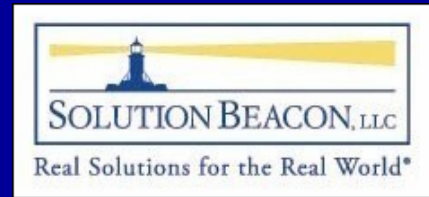
Presenter – Brian Bent



- ◆ Oracle DBA 8 Years
- ◆ Oracle Apps DBA 6 Years
- ◆ Apps on RAC Instructor
- ◆ Oracle Certified Professional
- ◆ Red Hat Certified Engineer
- ◆ Release 10.x to 11i
- ◆ RDBMS Version 7 to 10g
- ◆ Email: bbent@solutionbeacon.com



Audience Profile



◆ Functional

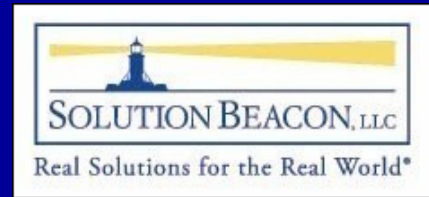
- Implementation/Upgrade Project Managers

◆ Technical

- Oracle Applications DBA
- Oracle Applications Developers
- Anyone bitten by AutoConfig



Overview



◆ Objectives of presentation

- Provide a good understanding of how AutoConfig and Rapid Clone actually work.
- Explain how to use AutoConfig and Rapid Clone in order to stabilize your environment

◆ Agenda

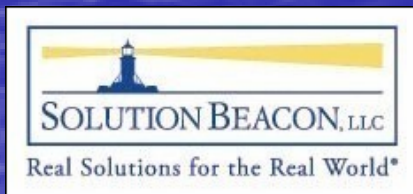
- AutoConfig Background
- Surviving AutoConfig
- Extending AutoConfig
- Rapid Clone



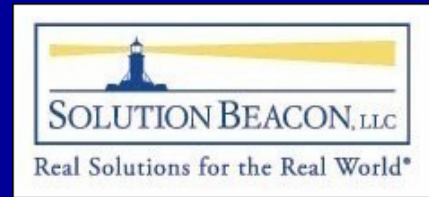
Background

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Background

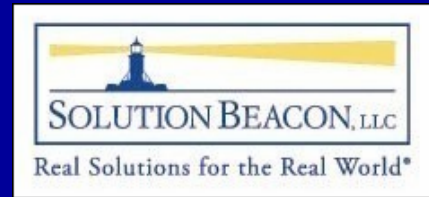


◆ Why do we need AutoConfig?

- 10.7 (Character, SmartClient) < 10 configuration files
- 10.7 (NCA) < 50 configuration files
- 11.0 < 50 configuration files
- 11i > 300 configuration files



Background

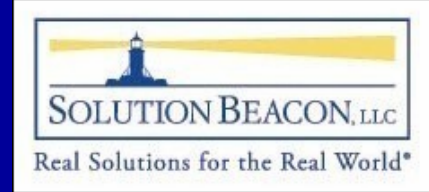


◆ What does AutoConfig enable?

- Configuration Management
- Stable
- Reproducible
- And mostly: CLONING



Background



◆ How does it work?

- Completely recreates all managed configuration files
- Context name is `SID_hostname` (unique for each instance/node combination)

- Context file:

`$APPL_TOP/admin/SID_hostname.xml`

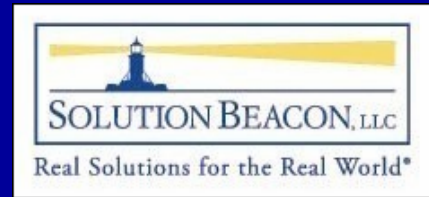
- Templates in

`$FND_TOP/admin/templates`

`$AD_TOP/admin/templates`



Background

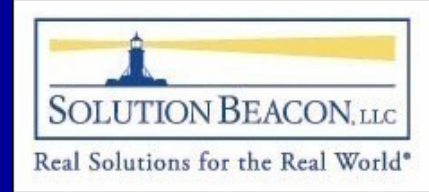


◆ How does it work?

- Written in perl/java
- Uses a “sed-like” search and replace to replace “tokens” in the template with “values” from the context file.



Background



Config file (`$APPL_TOP/APPS.env`) containing:

```
export TWO_TASK=PROD
```

Template (`$FND_TOP/admin/template/apps_ux.env`) would contain:

```
export TWO_TASK=%s_oracle_sid%
```

Context file (`$APPL_TOP/admin/PROD_appshost.xml`) would contain:

```
<s_oracle_sid>PROD</s_oracle_sid>
```



◆ How does it work?

- AutoConfig would (essentially) perform this operation:

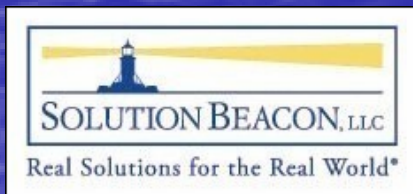
```
cat $FND_TOP/admin/template/apps_ux.env | \  
sed s/%s_oracle_sid%/"PROD"/g \  
>$APPL_TOP/APPS.env
```



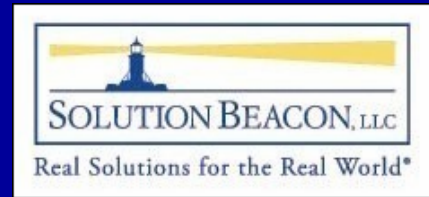
Surviving AutoConfig

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Surviving AutoConfig



◆ AutoConfig is run

- On demand by the DBA
- By Rapid Clone to configure an instance
- After patching (either by `adpatch` or manually by the DBA)

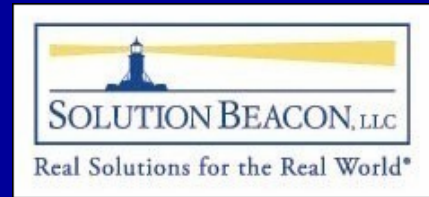
◆ An AutoConfig run CAN be backed-out (See: Oracle Apps Maintenance Procedures)

`$APPL_TOP/admin/PROD_appshost/out/<MMDDhhmm>`

`$ORACLE_HOME/appsutil/out/PROD_appshost/<MMDDhhmm>`



Surviving AutoConfig

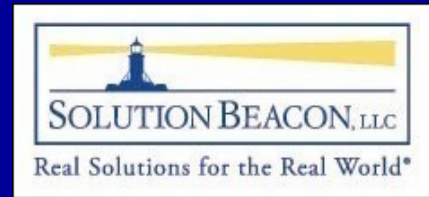


◆ Things to avoid

- Direct edits to configuration files
 - ◆ Managed configuration files generally contain a “header” that identifies them as such
- Direct edits to the templates



Surviving AutoConfig



◆ But I need to change things!

- Change values in the Context File
- Make use of Include Files

◆ Database `initSID.ora`

`$ORACLE_HOME/dbs/PROD_appshost_ifile.ora`

◆ All `tnsnames.ora`

`$TNS_ADMIN/PROD_appshost_ifile.ora`

◆ All `listener.ora`

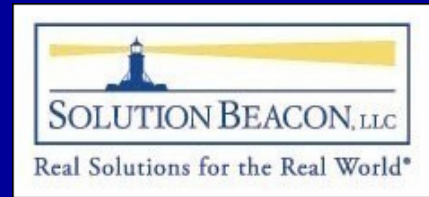
`$TNS_ADMIN/listener_ifile.ora`

◆ Unix Environment files

`customPROD_appshost.env`



Surviving AutoConfig



◆ But I need to change things!

- Define a custom top the “old” way:

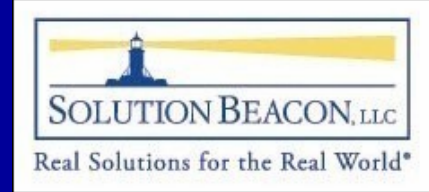
```
# Begin customizations
XXCUST_TOP=$APPL_TOP/xxcust/11.5.0
export XXCUST_TOP
# End customizations
```

- Or, the current way, by adding the following line to \$APPL_TOP/admin/topfile.txt (MetaLink: 216589.1)

```
xxcust /oracle/oraprod/prodappl
```



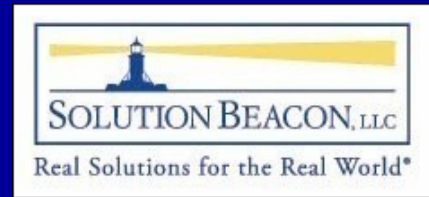
Surviving AutoConfig



- ◆ New method of customizing (MetaLink 270519.1)
 - `adcustomizer.sh` (convert from old method to new)



Surviving AutoConfig



◆ But I need to change things!

- Use the configuration wizards to enable things like Forms Servlet Mode (MetaLink 277574.1)

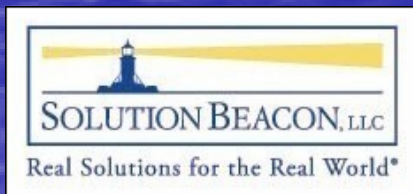
```
$FND_TOP/bin/txkrun.pl \  
-script=SetAdvCfg \  
-appuser=apps -appspass=apps \  
-enable=FormsLsnrServlet
```



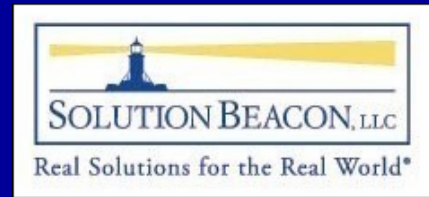
Extending AutoConfig

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Extending AutoConfig



◆ Customizing Templates (MetaLink 270519.1)

- appsTier templates live in:

`$AD_TOP/admin/template`

`$FND_TOP/admin/template`

- dbTier templates live in:

`$ORACLE_HOME/appsutil/template`



◆ Customizing Templates (MetaLink 270519.1)

- Determine which template is being used

appsTier:

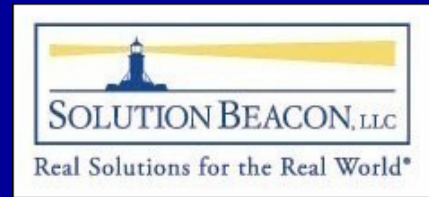
```
$AD_TOP/bin/adtmplreport.sh contextfile=<context> \  
target=<configurationfile>
```

dbTier:

```
$ORACLE_HOME/appsutil/bin/adtmplreport.sh \  
contextfile=<context> \  
target=<configurationfile>
```



Extending AutoConfig



◆ Customizing Templates (MetaLink 270519.1)

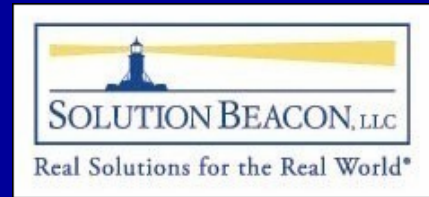
- Create a “custom” directory

`$FND_TOP/admin/template/custom`

- Copy template into custom directory
- Apply your changes to the custom template



Extending AutoConfig



◆ Caveat:

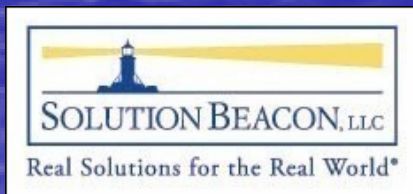
- Certain patches (Notably AD, FND, TXK) can deliver updated templates.
 - Use `$APPL_TOP/admin/applcust.txt` to keep track
 - Newer releases of AutoConfig will notify you if a customized template is out of date.
- ◆ You can also create your own AutoConfig tokens and templates (MetaLink 270519.1)



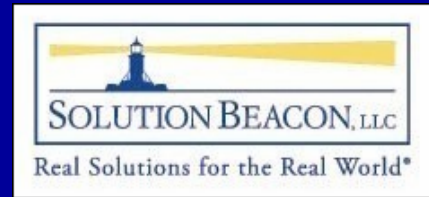
Rapid Clone

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Rapid Clone



- ◆ Used to produce clones of a given environment (MetaLink 230672.1)
- ◆ Preparing for a clone
 - Build a current appsutil directory for your database \$ORACLE_HOME (MetaLink 165195.1)

```
perl $AD_TOP/bin/admkappsutil.pl
```

will produce

```
$APPL_TOP/admin/out/appsutil.zip
```

Which you will then need to unzip into your database

```
$ORACLE_HOME
```

```
cd $ORACLE_HOME
```

```
unzip -o $APPL_TOP/admin/out/appsutil.zip
```



◆ Pre-Clone (on SOURCE) gathers information

● dbTier

```
cd $ORACLE_HOME/appsutil/scripts/PROD_appshost  
perl adpreclone.pl dbTier
```

◆ Context file stored in:

```
$ORACLE_HOME/appsutil/clone/context/db/PROD_appshost.xml and CTXORIG.xml
```

◆ Database Controlfile Script stored in:

```
$ORACLE_HOME/appsutil/clone/data/stage/adcrdb.zip  
(adcrdbclone.sql)
```



◆ Pre-Clone (on SOURCE) gathers information

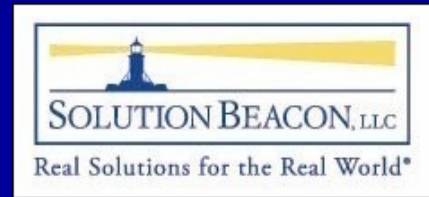
● appsTier

```
cd $COMMON_TOP/admin/scripts/PROD_appshost  
perl adpreclone.pl appsTier
```

◆ Context file stored in

```
$COMMON_TOP/clone/context/apps/PROD_appshost.xml  
and CTXORIG.xml
```

Rapid Clone



◆ Copy Files

● appsTier

<APPL_TOP>

<OA_HTML>

<OA_JAVA>

<OA_JRE_TOP>

<COMMON_TOP>/util

<COMMON_TOP>/clone

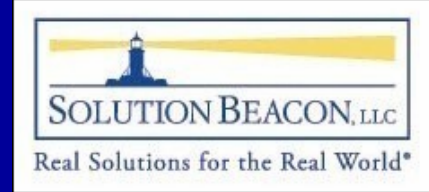
<COMMON_TOP>/_pages (when exists)

<806 ORACLE_HOME>

<iAS ORACLE_HOME>



Rapid Clone



◆ Copy Files

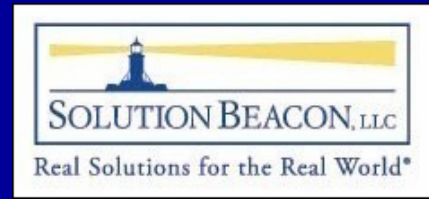
- dbTier

\$ORACLE_HOME

Database Files



Rapid Clone



◆ Post-Clone uses gathered information (and interview) to generate new environment

● dbTier

```
cd $ORACLE_HOME/appsutil/clone/bin  
perl adcfgclone.pl dbTier
```

◆ Answer questions

◆ `adcfgclone.pl` will generate `$TNS_ADMIN` directory `$ORACLE_HOME/dbs` and database controlfile.

◆ Database and listener will be started

◆ `$ORACLE_HOME` will be registered in OUI



Rapid Clone



◆ Post-Clone uses gathered information (and interview) to generate new environment

● appsTier

```
cd $COMMON_TOP/clone/bin  
perl adcfgclone.pl appsTier
```

◆ Answer questions

◆ `adcfgclone.pl` will generate new config files, updates profile options, and start the appsTier components

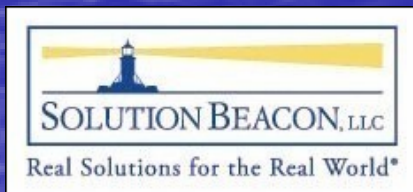
◆ `$ORACLE_HOME` will be registered in OUI



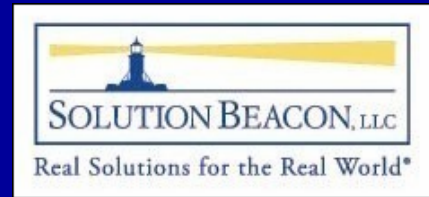
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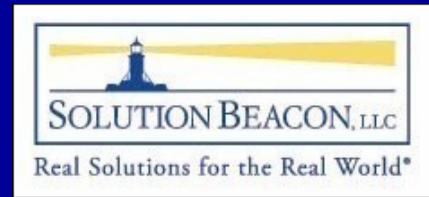
Referenced Documents



| MetaLink | Title |
|----------|---|
| 165195.1 | Using AutoConfig to Manage System Configurations with Oracle Applications 11i |
| 216212.1 | Business Continuity for Oracle Applications Release 11i, Database Releases 9i and 10g |
| 230672.1 | Cloning Oracle Applications Release 11i with Rapid Clone |
| 270519.1 | Customizing an AutoConfig Environment |
| 345145.1 | Is There A Way To Automate The Prompts For Adcfgclone.PI? |
| 362473.1 | Cloning E-Business Suite using Hot Backup for Minimal Downtime of Source Environment |



AutoConfig Managed Files



- ◆ Some of the most commonly modified AutoConfig managed files

Database Tier

Database \$ORACLE_HOME

\$ORACLE_HOME/PROD.env

\$ORACLE_HOME/PROD_appshost.env

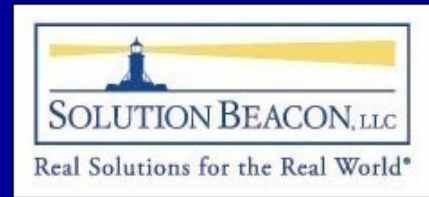
\$ORACLE_HOME/dbs/initPROD.ora

\$TNS_ADMIN/listener.ora

\$TNS_ADMIN/tnsnames.ora



AutoConfig Managed Files



- ◆ Some of the most commonly modified AutoConfig managed files

Applications Tier

8.0.6 Client \$ORACLE_HOME

`$ORACLE_HOME/PROD.env`

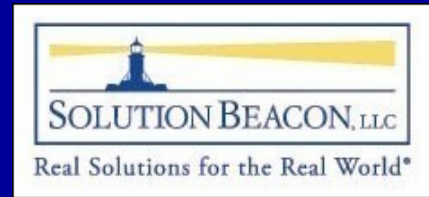
`$ORACLE_HOME/PROD_appshost.env`

`$TNS_ADMIN/listener.ora`

`$TNS_ADMIN/tnsnames.ora`



AutoConfig Managed Files



- ◆ Some of the most commonly modified AutoConfig managed files

Applications Tier (continued)

Oracle iAS $\${IAS_ORACLE_HOME}$

$\$ORACLE_HOME/PROD.env$

$\$ORACLE_HOME/PROD_appshost.env$

$\$TNS_ADMIN/listener.ora$

$\$TNS_ADMIN/tnsnames.ora$

$\$ORACLE_HOME/Apache/Apache/conf/httpd.conf$

$\$ORACLE_HOME/Apache/Apache/conf/httpd_pls.conf$

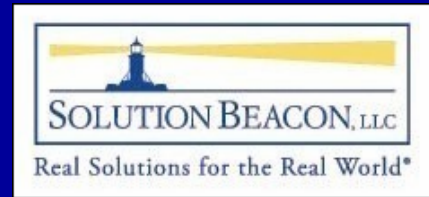
$\$ORACLE_HOME/Apache/Jserv/etc/formservlet.ini$

$\$ORACLE_HOME/Apache/Jserv/etc/jserv.properties$

$\$ORACLE_HOME/Apache/Jserv/etc/jserv.conf$



AutoConfig Managed Files



- ◆ Some of the most commonly modified AutoConfig managed files

Oracle Applications \$APPL_TOP

`$APPL_TOP/admin/APPSORA.env`

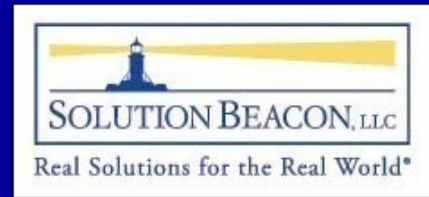
`$APPL_TOP/admin/APPSPROD_appshost.env`

`$APPL_TOP/admin/PROD.env`

`$APPL_TOP/admin/PROD_appshost.env`



Questions and Answers



Thank you!

Brian Bent

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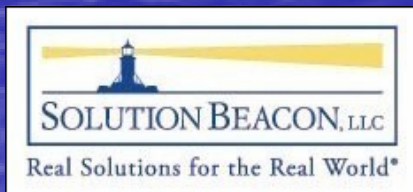
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(or "Teaching an Old Dog New Tricks - Release 11i Care and Feeding")

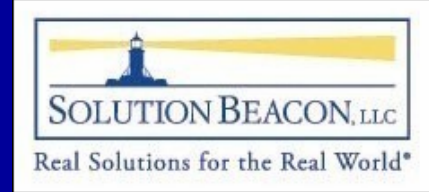
*Installing, Upgrading and Maintaining
Oracle E-Business Suite Applications
Release 11.5.10+*

*By Barbara Matthews, John Stauffer, Randy Giefer, Karen Brownfield, Jeff Holt,
Bruno Coon, James Morrow, Tim Sharpe and Faun deHenry*

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- ◆ Please complete your survey / evaluations
- ◆ Join us for the HP Social Hour 4:15-5:30 PM

