Autoconfig R12.1/R12.2

Detailed working of Autoconfig engine

Agenda

- **What is AutoConfig?**
- **How it works?**
- **Maintaining System Configuration Using AutoConfig**
- **Components of AutoConfig**
- **How to customize the Autoconfig template files**
- **R12.2 restrictions**

What is autoconfig

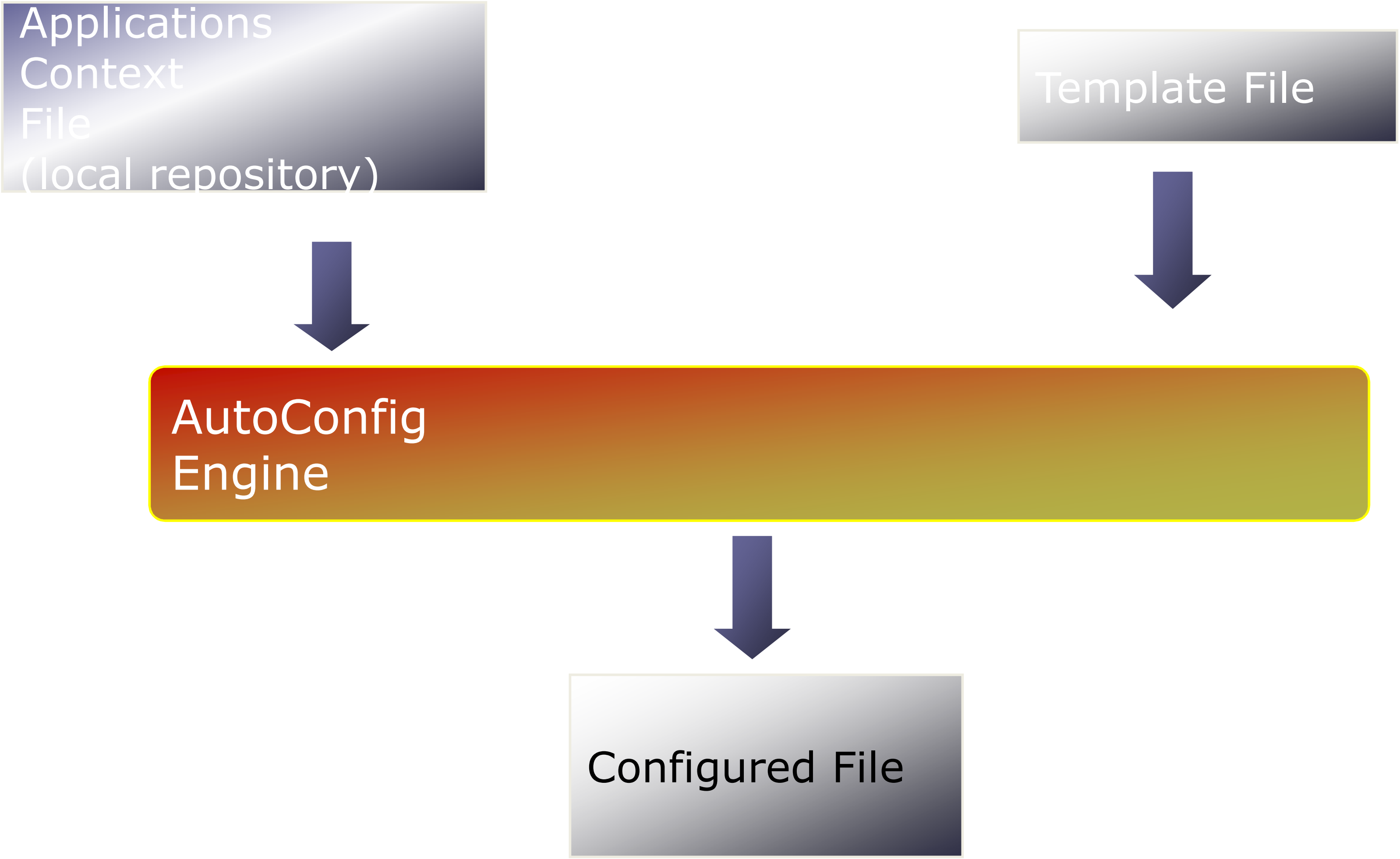
- AutoConfig is a tool that supports automated configuration of an Applications instance.
  -Autoconfig tool is a set of scripts to centralize and simplify E-Business Suite configuration management.
  -It does so by maintaining a central repository of E-Business Suite environment information in a context file(.xml) on each mid-tier.
  -Run adconfig command to propagate changes to all the corresponding files.

How it works

1)First create the Context file using adbldxml.sh
2)Provide the required parameter values in context file, like s_webport=8000.
3) Run autoconfig using adconfig.sh
4) Autoconfig engine scans the /admin/driver directory to find the "template Driver file " like it reads "fndtmpl.drv" under $FND_TOP/admin/driver to get the list of files to be created for this product.

For example it gets httpd.conf to be created as
fnd admin/template httpd_ux.conf INSTE8 /Apache/Apache/conf httpd.conf
5) from the above entry in driver file it also gets the "template filename" as "httpd_ux.conf" to be used to create the httpd.conf file.
6)For creating httpd.conf it reads the parameter from "httpd_ux.conf" and corresponding value from context file, for e.g for %s_webport% parameter it reads corresponding value from context file and replaces the parameter in the created httpd.conf file.

Working Diagram



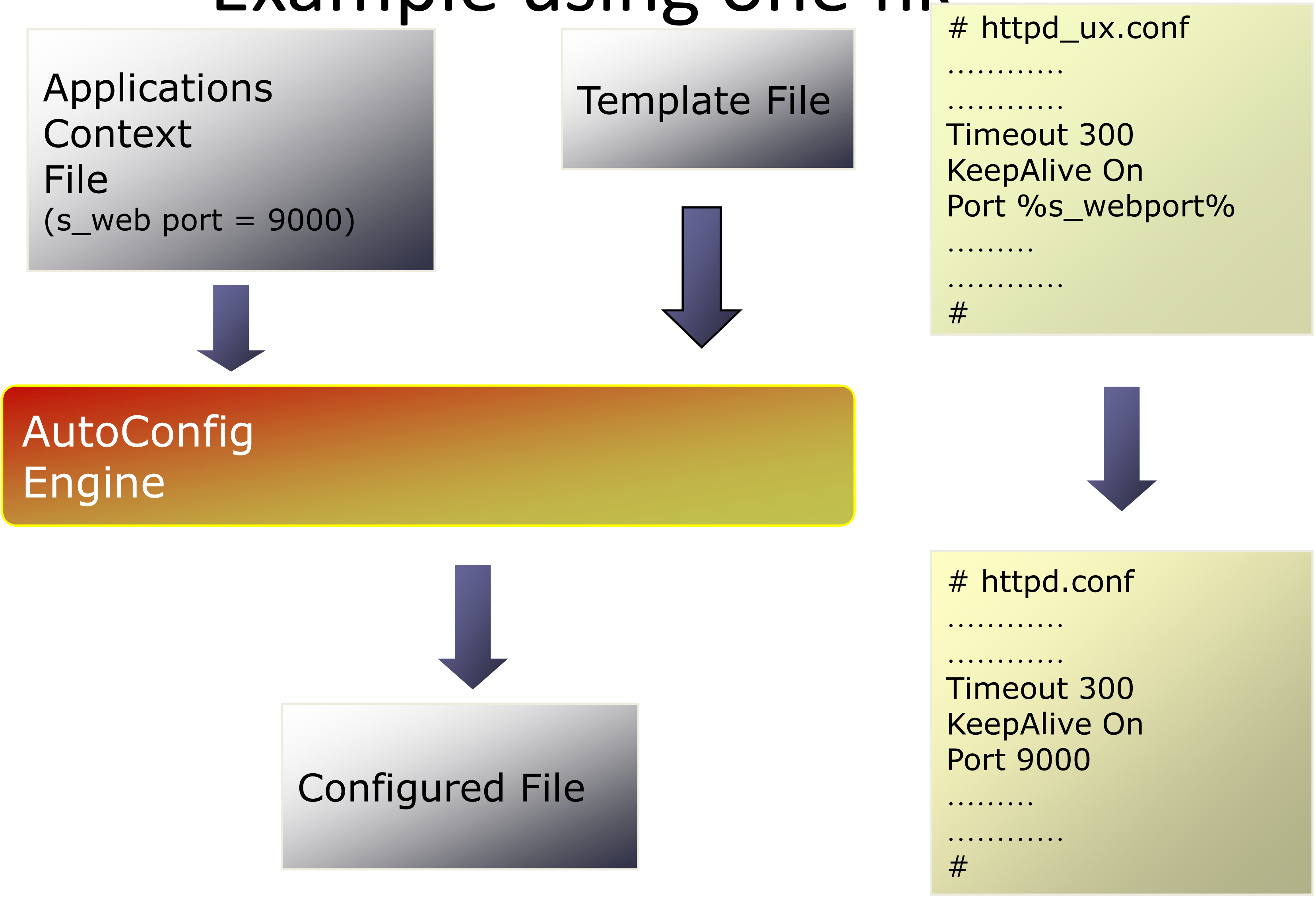
Applications Context File (local repository)

Template File

AutoConfig Engine

Configured File

Example using one file



Applications Context File
(s_web port = 9000)

Template File

AutoConfig Engine

Configured File

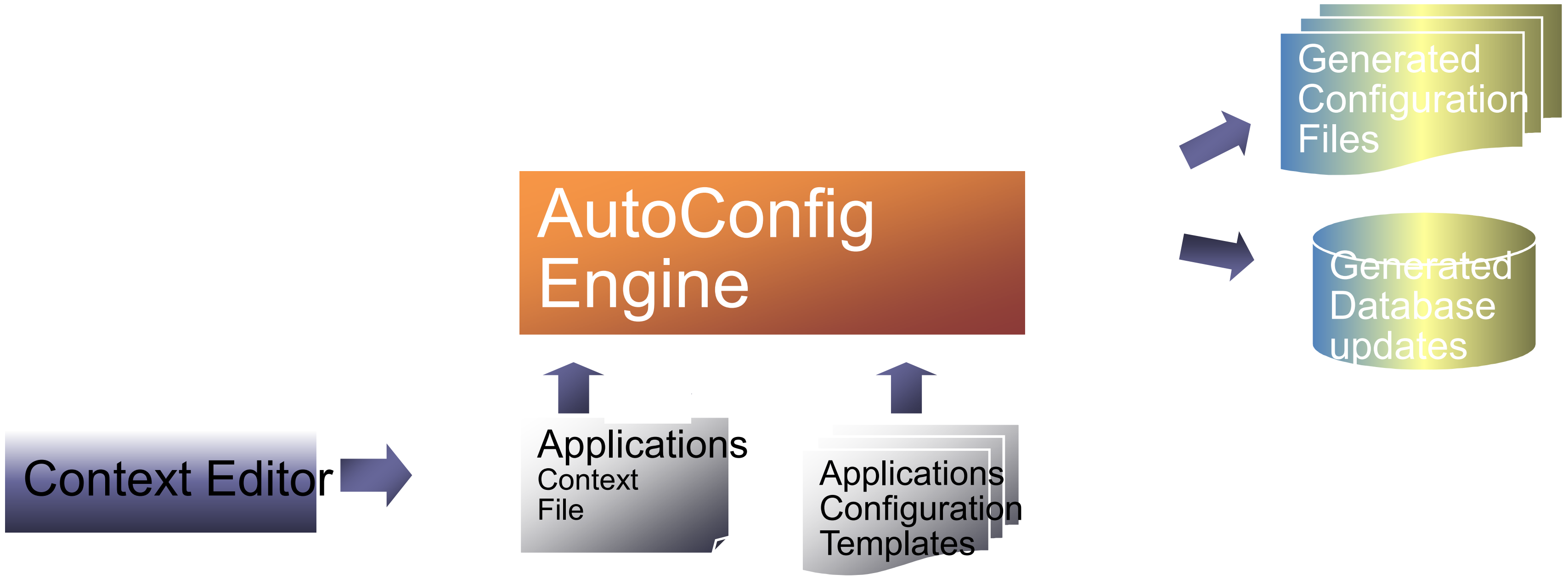
```
# httpd_ux.conf
............
............
Timeout 300
KeepAlive On
Port %s_webport%
.........
............
#
```

```
# httpd.conf
............
............
Timeout 300
KeepAlive On
Port 9000
.........
............
#
```

How to Implement Autoconfig

1)Apply Autoconfig Patches
2)Change ownership of the application tier ORACLE_HOME .It should be owned by applmgr
3)Migrate Database tier to autoconfig
4)Generate appsutil.zip using perl $AD_TOP/bin/admkappsutil.pl on admin tier as applmgr
5)Copy appsutil.zip to $ORACLE_HOME on database tier
6)unzip appsutil.zip
7)Create context.xml file using adbldxml.sh on Database tier as oracle
8)Generate diff Report using adcfgchk.sh and Analyze for differences.
9)Perform pre-Autoconfig steps
10)Run Autoconfig and do post Autoconfig Steps
11)Migrate Application tier to autoconfig
12)Create context.xml file using adbldxml.sh on Middle tier as applmgr
13)Generate diff Report using adcfgchk.sh and Analyze for differences.
14)Perform pre-Autoconfig steps
15)Run Autoconfig and do post Autoconfig Steps
16)Start applications using Autoconfig utilities.

How to make changes to configuration


Generated Configuration Files
Generated Database updates
AutoConfig Engine
Context Editor
Applications Context File
Applications Configuration Templates

Autoconfig Scripts

- **Autoconfig Scripts**
  -adbldxml.sh – Creates the Applications context file, e.g. .xml
  -adchkcfg.sh – This script is used for analysis purpose. It generates a report that shows differences between the original configuration files and the AutoConfig generated configuration files.
  -adconfig.sh – This script calls the Java API to run the AutoConfig engine, which instantiates template files with instance-specific details from the XML context file, updates configuration files and profile options.

Autoconfig context file

- **Autoconfig Context file** -Context file contains all the variables and their values related to the files of tech stack, environment for managing the variables centrally.
  -Context file is created under $APPL_TOP/admin with naming conventions as .xml using adbldxml.sh script.

Autconfig template files

- **Autoconfig template files**-Template files that include named tags, which are replaced with instance-specific information from the according Context (this process is called “instantiation”).
  -The template files are located in the relevant product. For e.g. $_TOP/admin/template directories like adapcctl_ux.sh
  resides under $AD_TOP/admin/template

  ```
  header_string=”$Header: adapcctl_ux.sh 115.50 2006/04/07 11:05:26 mmanku ship $”
  prog_version=`echo “$header_string” | awk ‘{print $3}’`
  program=`basename $0`
  usage=”t$program {start|stop|status|graceful|restart|configtest|help}”
  ```

-
  ```
  #
  # Make sure the logfile directory exists
  #
  if [ ! -d `dirname %s_apclog%` ]; then
  mkdir -p `dirname %s_apclog%`
  fi;
  if [ ! -d `dirname %s_apclog_pls%` ]; then
  mkdir -p `dirname %s_apclog_pls%`
  fi;
  ```

-
  ```
  printf “n$program version $prog_versionnn”
  ```

- -It is used to store site-specific details for each product. It maintains the template info about an specific file as what it will contain. As above, varaible “”%s_apclog%” represnts a parameter value as defined in context file.

Autoconfig template Driver files

-Every product in the E-Business Suite maintains a driver file used by AutoConfig. The driver file lists the AutoConfig file templates and their destination locations.

-Used to tell AutoConfig how to build target files

-AutoConfig searches each /admin/driver directory,

Looking for the appropriate tmpl.drv files.

For example: adtmpl.drv,fndtmpl.drv

How to customize the Autoconfig template files

1)Decide about the file to customize

2) Go the Product whose file is getting customized

3) Create $<PRODUCT_TOP>/admin/template/custom directory

4) copy the template and customize it

Continued

- You cannot customize all AutoConfig template files. The AutoConfig template file cannot be customized if the “LOCK” keyword appears in the template file’s entry in the product driver file. AutoConfig ignores custom template files that are marked with “LOCK”.
- For example, the following entry in /admin/driver/adtmpl.drv would prevent customization of the file adconfig.txt:
  ad admin/template adconfig.txt INSTE8 /admin adconfig.txt 600 LOCK

R12.2 Autoconfig Restrictions

- With the inclusion of web logic in R12.2 techstack,all the configuration are not managed by Autoconfig
- Some of the Apache config files are under fusion middleware control now, namely httpd.conf, admin.conf and ssl.conf. All other Apache config files are still under Autoconfig control.
- if you have to change the port used by EBS instance, then you have to log into the Weblogic admin console and change port there and then sync context xml file using adSyncContext.pl. This adSyncContext.pl utility will get the current port values from Weblogic console and update the xml with new port values. Once the context xml file syncs, we have to run Autoconfig to sync other config files and database profile values to pickup new webport

Thank You

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