

C1: Archiving Solution With WPG

Overview



Objectives

- Reasons to archive
- Describe bundled archive solution
- Describe custom archive solution
- Video Demonstration

Why Archive?



- Performance
- Security
- Compliance
- Non-repudiation

Bundled Solution

Limitations

- Incomplete archive steps
- Manual steps required for daily operation
- Complex configuration and usage
- Archive dates inflexible

Custom Solution

Advantages

- Additional archive steps performed
- Directory cleanup
- Callable by shell script or command line
- Simple configuration and usage
- Archive dates are specified as elapsed days

Custom Solution (2)

Design

- Java console application extension to WPG
- Source code available
- Supports DB2 (future support for Oracle)
- Utilizes some open-source components
- Compatible with Advanced and Enterprise
- Available for all supported OS

Project Walk-Thru

Project

- Written for Java 1.4 JVM
- Utilizes ANT build scripts
- Easily importable to WSAD, Eclipse or other IDEs

Project Walk-Thru⁽²⁾

Libraries

- jargs - For processing of command line
- log4j - For logging functions
- ant - For building project
- db2 - For accessing database (bundled with WPG)

Project Walk-Thru⁽³⁾

Classes

- Main.java - Command line interface
- Archive.java - Performs archive steps
- Config.java - Holds configuration information

Project Walk-Thru⁽⁴⁾

Building - Ant Targets

- clean - Erase all generated files
- deploy - Create distribution
- updateversion - Increment build number (TBA)

Project Walk-Thru⁽⁵⁾

Deployment Files

- jargs.jar, log4j-1.2.8.jar - Library files
- log4j.properties - Log4j configuration
- README - End user instructions
- WPGArchive.cmd - Windows Script
- WPGArchive.sh - UNIX Script
- WPGArchive.zip - Archive classes

Deployment

Steps

- Create a new directory in WPG Installation
- Copy all deployment files to this directory
- Prepare command line options
- Execute batch file to begin archive process
- Optionally run as cron or timed task

Archive Steps

Read LG_MSG_ARCHIVE table for files to archive from the non_rep and msg_store directories.

Create a Zip and index on files to be archived

Delete original files

Remove records from LG_MSG_ARCHIVE and LG_CERT_ARCHIVE

Archive Steps (2)

Execute the AR_STATEENGINE_MAINTENANCE stored procedure

Execute the AR_SUMMARY_MAINTENANCE stored procedure

Execute the AR_PURGE_HEADERS stored procedure

Remove records from BP_SPONSOR_STATE, BP_DUPCHECK, BP_RNMSGDIGEST and BP_PROCESS_LOG tables.

Archive Steps (3)

Remove records from the LG_DELIVERY_LOG, LG_DM_DOC_LOCK, LG_MSG_ARCHIVE and LG_VTP_STATUS tables.

Remove files and prune directories from {WPG_Common}\data\Inbound\bpeResend directory

Remove files and prune directories from {WPG_Common}\data\Inbound\process directory

Remove files and prune directories from {WPG_Common}\data\Inbound\reject directory

Archive Steps (4)

Remove files and prune directories from
{WPG_Common}\data\Inbound\serialize directory

Remove files and prune directories from
{WPG_Common}\gateways directory

Remove files and prune directories from
{WPG_Common}\sync_in directory

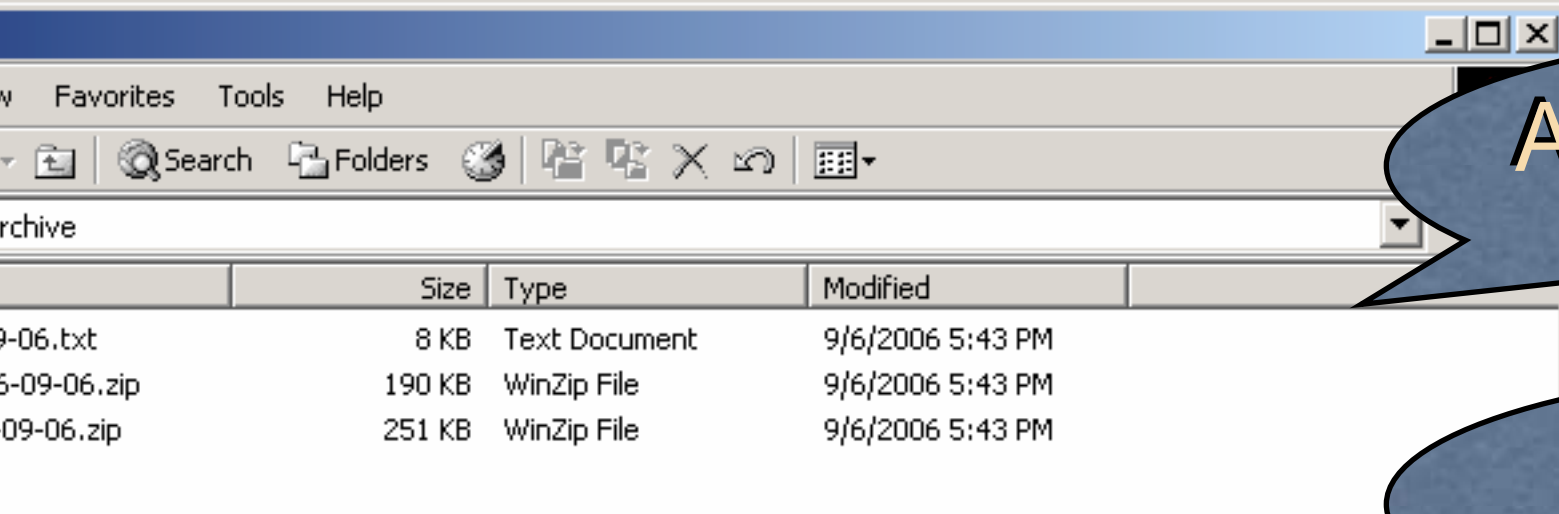
Remove files and prune directories from
{WPG_Common}\signal_in directory

Archive Steps (5)

Remove files and prune directories from
{WPG_Common}\msg_store\0 directory

Remove files and prune directories from
{WPG_Common}\non_rep\0 directory

Archive Output



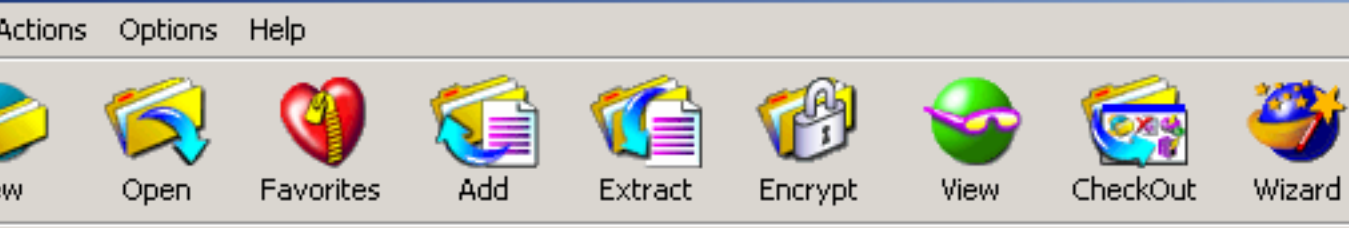
File Explorer window showing the contents of an archive. The table below lists the files:

File Name	Size	Type	Modified
9-06.txt	8 KB	Text Document	9/6/2006 5:43 PM
5-09-06.zip	190 KB	WinZip File	9/6/2006 5:43 PM
09-06.zip	251 KB	WinZip File	9/6/2006 5:43 PM

Archive Direct

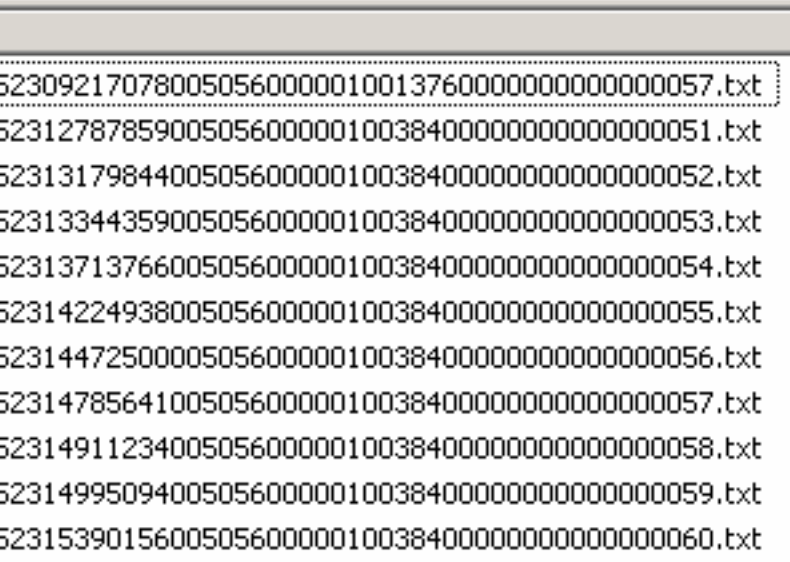
Payload Zip

WinZip (Evaluation Version) - MsgStore_2006-09-06.zip



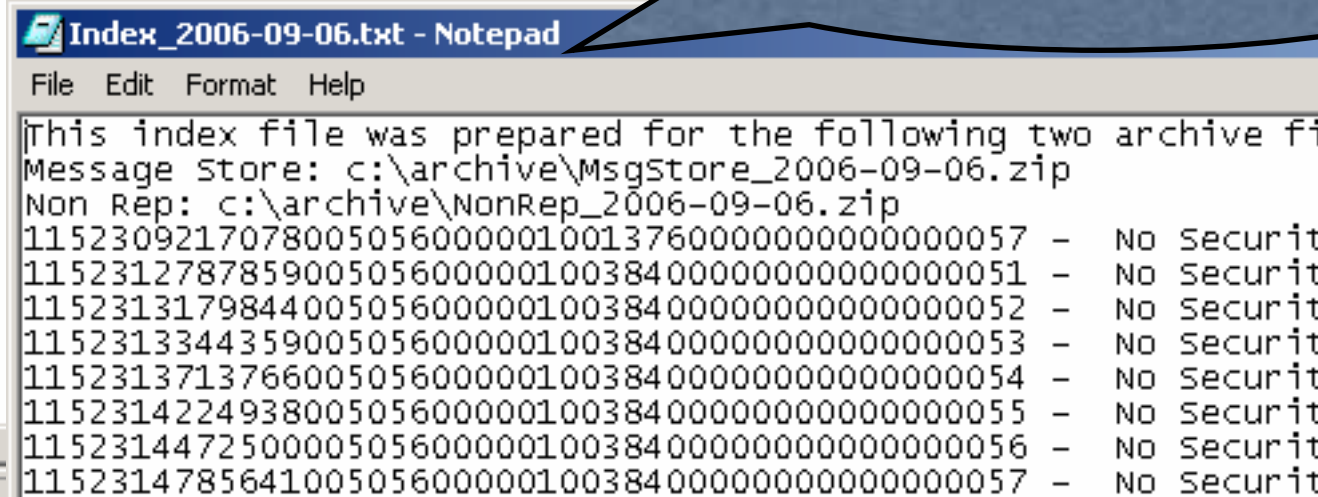
WinZip toolbar with icons for Open, Favorites, Add, Extract, Encrypt, View, CheckOut, and Wizard.

Index File



File list in WinZip showing a list of text files with long alphanumeric names:

File Name	Type	Size
523092170780050560000010013760000000000000057.txt	Text Document	10,349
523127878590050560000010038400000000000000051.txt	Text Document	10,349
523131798440050560000010038400000000000000052.txt	Text Document	10,349
523133443590050560000010038400000000000000053.txt	Text Document	10,349
523137137660050560000010038400000000000000054.txt	Text Document	10,349
523142249380050560000010038400000000000000055.txt	Text Document	10,349
523144725000050560000010038400000000000000056.txt	Text Document	10,349
523147856410050560000010038400000000000000057.txt	Text Document	10,349
523149112340050560000010038400000000000000058.txt	Text Document	10,349
523149950940050560000010038400000000000000059.txt	Text Document	10,349
523153901560050560000010038400000000000000060.txt	Text Document	10,349



Index_2006-09-06.txt - Notepad

```
File Edit Format Help
This index file was prepared for the following two archive files:
Message Store: c:\archive\MsgStore_2006-09-06.zip
Non Rep: c:\archive\NonRep_2006-09-06.zip
115230921707800505600000100137600000000000000057 - No Security
11523127878590050560000010038400000000000000051 - No Security
11523131798440050560000010038400000000000000052 - No Security
11523133443590050560000010038400000000000000053 - No Security
11523137137660050560000010038400000000000000054 - No Security
11523142249380050560000010038400000000000000055 - No Security
11523144725000050560000010038400000000000000056 - No Security
11523147856410050560000010038400000000000000057 - No Security
```

Demonstration

The screenshot shows a Windows XP desktop environment. The primary window is WinZip (Evaluation Version) - MsgStore_2006-09-06.zip, which is open to a file list. The file list contains 20 text documents, all created on 9/6/2006 at 4:35 PM. The files are named with long alphanumeric strings ending in .txt. The status bar at the bottom of the WinZip window indicates 'Selected 0 files, 0 bytes' and 'Total 2010 files, 4,920KB'. In the background, a command prompt window is visible, displaying the command 'C:\archive' and the output 'Cleaning database records from LG MSG ARCHIVE'. The taskbar at the bottom shows the Start button, several application icons, and the system tray with the time 4:39 PM and a timer at 00:05:38.

Name	Type	Modified
11523092170780050560000010013760000000000000057.txt	Text Document	9/6/2006 4:35 PM
11523127878590050560000010038400000000000000051.txt	Text Document	9/6/2006 4:35 PM
11523131798440050560000010038400000000000000052.txt	Text Document	9/6/2006 4:35 PM
11523133443590050560000010038400000000000000053.txt	Text Document	9/6/2006 4:35 PM
11523137137660050560000010038400000000000000054.txt	Text Document	9/6/2006 4:35 PM
11523142249380050560000010038400000000000000055.txt	Text Document	9/6/2006 4:35 PM
11523144725000050560000010038400000000000000056.txt	Text Document	9/6/2006 4:35 PM
11523147856410050560000010038400000000000000057.txt	Text Document	9/6/2006 4:35 PM
11523149112340050560000010038400000000000000058.txt	Text Document	9/6/2006 4:35 PM
11523149950940050560000010038400000000000000059.txt	Text Document	9/6/2006 4:35 PM
11523153901560050560000010038400000000000000060.txt	Text Document	9/6/2006 4:35 PM
11523156962340050560000010038400000000000000061.txt	Text Document	9/6/2006 4:35 PM
11523158447190050560000010038400000000000000062.txt	Text Document	9/6/2006 4:35 PM
11523159794840050560000010038400000000000000063.txt	Text Document	9/6/2006 4:35 PM
11523162154060050560000010038400000000000000064.txt	Text Document	9/6/2006 4:35 PM
11523163712340050560000010038400000000000000065.txt	Text Document	9/6/2006 4:35 PM

Thank You

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