Common Event Handling
Java API

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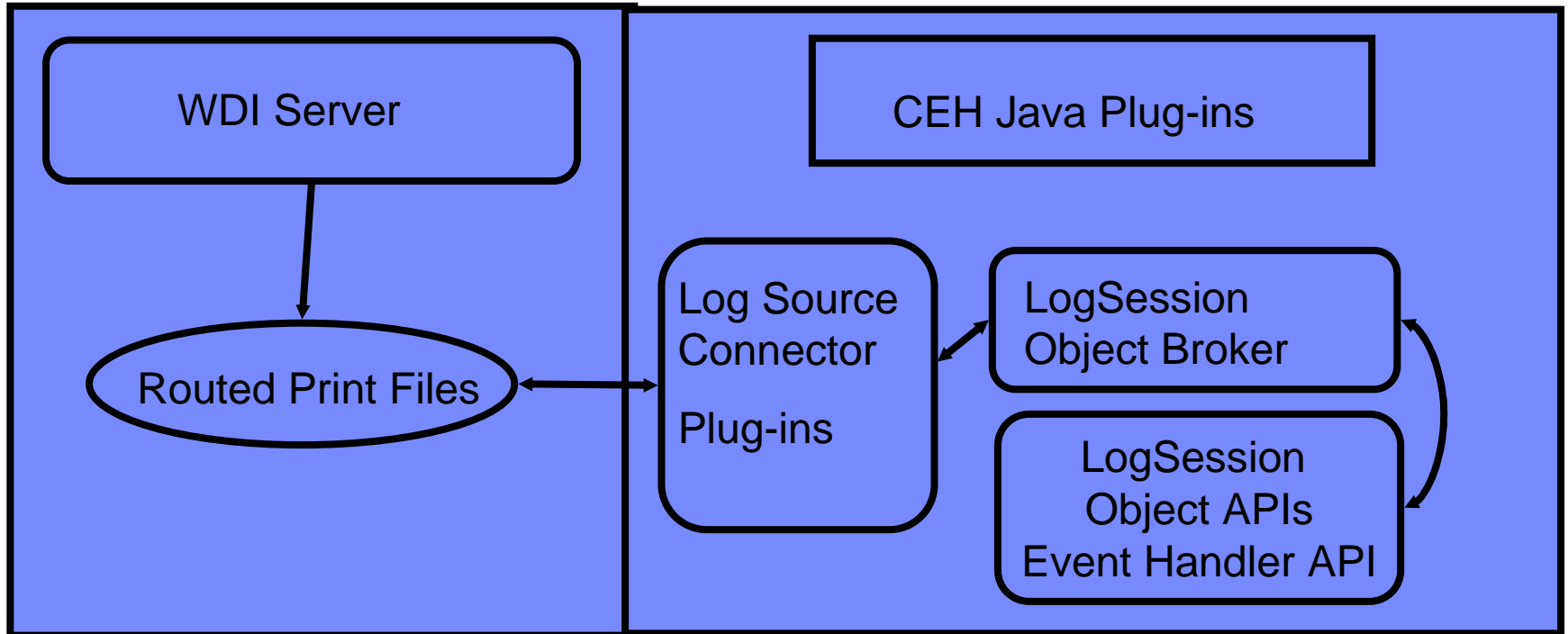
Agenda

- Introduction to CEH Java API and Plug-ins

- Architecture

- LogSession Connectors

- LogSession

- Log Handler API

- E-mail Log Handler Plug-in Sample

- Summary

- Questions? Answers!

WDI Server to Common Event Handler Plug-ins

WDI Server

CEH Java Plug-ins

Routed Print Files

Log Source
Connector

Plug-ins

LogSession
Object Broker

LogSession
Object APIs
Event Handler API

WDI Log Session Source Connector

- **Connectors provided for a variety of sources**
  - ▸ WebSphere Message Queues
  - ▸ Hierarchical File Systems – AIX, Windows, USS
  - ▸ DataSets
  - ▸ Temporary Storage Queues
  - ▸ Transient Data Queues

WDI Log Structure

- ## Optional Preamble

  - ▶ Associated Destination Properties

  - ▶ Defaults come from a property resource file

- ## WDI LogSession API

  - ▶ Document Identifiers

  - ▶ Message Information

  - ▶ Raw Print File

WDI Log Structure - Preamble

```xml
<?xml version="1.0" ?>

<DestHeader>

  <DestProfile>DESTID1</DestProfile>

  <DestProperty>

        <PropertyName>toAddress</PropertyName>

        <PropertyValue>eventAdmin@us.ibm.com</PropertyValue>

  </DestProperty>

  <DestProperty>

        <PropertyName>fromAddress</PropertyName>

        <PropertyValue>wdiServer@us.ibm.com</PropertyValue>

  </DestProperty>

</DestHeader>
```

WDI Log Structure – Document Information

- <DocInfo>

- <DocId>20060816135154668250</DocId>

- <Direction>Input</Direction>

- <Syntax>xml</Syntax>
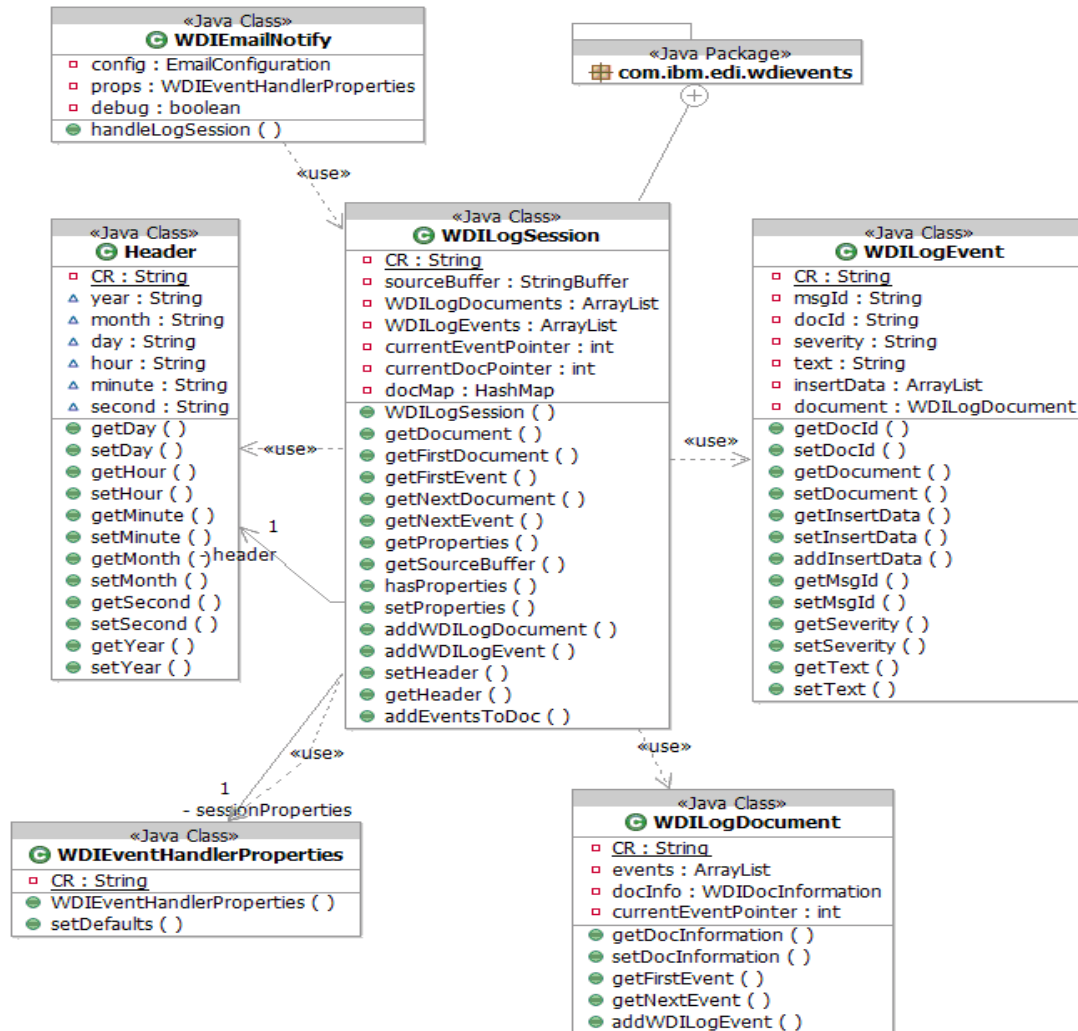
- <Dictionary>GS1V2.0.2</Dictionary>

- <Sndtpnick>WRESNDR879</Sndtpnick>

- <Sndid></Sndid>

- <Sndqual></Sndqual>

- <Rcvtpnick></Rcvtpnick>

- <Rcvid></Rcvid>

- <Rcvqual></Rcvqual>

- <Document></Document>

- <Intctlnum></Intctlnum>

- <Grpctlnum></Grpctlnum>

- <Trxctlnum></Trxctlnum>

- </DocInfo>

WDI Log Structure – Event Messages

- `<Message>`

- `<MsgId>UT0008</MsgId>`

- `<DocId>20060816135154668250</DocId>`

- `<Severity>00</Severity>`

- `<Text>Map name being processed: POXML5SR-EDI.
</Text>`

- `<InsertData>POXML5SR-EDI</InsertData>`

- `</Message>`

WDI Log Session Java API

WDI E-mail Plug-in

- Implements WDI Log Event Handler Interface

- Source Code Provided

- Can send customizable e-mail with log attached or location of log for remote problem determination

- Uses JavaMail API for delivery to any SMTP compliant e-mail service provider.

WDI E-mail Plug-in

- SMTP and e-mail properties are configured with

  ▶ Resource file

  ▶ Associated Destination Properties from the Log Session Preamble.

- If the notification e-mail could not be sent

  ▶ Retry a configured number of intervals.

  ▶ A set a return code informing the Log Session Broker to roll back the LogSession or move it to another location for later retry.

WDI Java Common Event and E-mail Plug-ins

Environments Supported

- Windows

- AIX

- z/OS Batch

- z/OS UNIX System Services

- CICS

WDI Event and E-mail Plug-ins

- **Minimum Java Requirements**
  - ▶ IBM Java 2 Technology Edition v1.4
  - ▶ Sun JavaMail v1.4

WDI Event and E-mail Plug-ins

- ## Configuration of Base Java API

  - ▸ ### Verify IBM Java installed and at correct level
    - Java –version
    - Java(TM) 2 Runtime Environment, Standard Edition (build 1.4.2_12-b03)
      - – z/OS java must show that it is at SR(6)

  - ▸ ### Verify CLASSPATH has entry for edicevh.jar
    - z/OS CICS needs additional CLASSPATH entries
      - – IBM Java for z/OS jars dfjwrap.jar and dfjcics.jar these jars are located in the IBM Java SDK installation directory.

WDI Event and E-mail Plug-ins

- ## Configuration of Java API LogSessionSource

  - ▶ Each Destination Type requires configuration

    - The HFS file system works with the base Java API configuration.

    - MQ Series java jars com.ibm.mqjms.jar, com.ibm.mq.jar, and connector.jar
      - Located in the IBM WMQ program product install directory

    - z/OS Batch java jars recjava.jar and recordio.jar for DataSet handling
      - Located in the IBM Java for z/OS program product install directory

    - CICS TSQ and TDQ java jars dfjwrap.jar and dfjcics.jar
      - Located in the IBM Java for z/OS program product install directory

Summary

- Print File Logs can be read from a variety of sources

- Destination Profile data provides run-time configuration and user parameters.

- XML formatted Print Files are parsed into detail objects that custom applications can process.

- Sample Code for an Event Handler that provides e-mail notification.

WDI Common Event Plug-ins

Questions?

Answers!