

Talend for JCAPS customers

Andreas Weiss

CEO ebuconnect GmbH

andreas.weiss@ebuconnect.de



Migration Path for CAPS

eWays (Adapters & Connectors)

- **TIS Component Palette and Repository**
 - TIS Components cover the majority out-of-the-box
 - Leverage Adapter Kit where necessary

eGate (ESB and Integration)

- **OTDs (Object Type Definitions)**
 - Talend ESB XSDs, JAX-B Classes
 - Replace with Schema Definitions in TIS
 - Go for XML/XSD and Services
- **Connectivity Maps**
 - convert/migrate to Camel Routes
- **JCDs (Java Collaboration Definitions)**
 - Talend ESB, Transformations, Java-Code
 - Re-use via TIS tJava, tXSLT
 - (semi-)automatic conversion to TIS tMap / Camel

eInsight (Orchestration)

- **Flows**
 - Re-model in TIS or Camel
 - Migrate to Talend BPM (Export → Import)

Migration Partner



Migration Path for eGate SRE

eWay Connections

- **TIS Component Palette and Repository**
 - TIS Components cover the majority out-of-the-box
 - Leverage Adapter Kit where necessary

eWays & BOBs (Business Object Broker)

- **ETDs (Event Type Definitions)**
 - Talend ESB XSDs, JAX-B Classes
 - Replace with Schema Definitions in TIS
 - Go for XML/XSD and Services
- **Collaborations Java and MONK (LISP)**
 - Talend ESB, Transformations, Java-Code
 - Re-use via TIS tJava, tXSLT
 - (semi-)automatic conversion to TIS tMap / Camel, For Monk Collabs: Monk2J

IQs (Intelligent Queues)

- **Active MQ**

Registry/Repository

- **Metadata Manager**

eInsight/eXchange (Orchestration)

- **Flows**
 - Re-model in TIS or Camel

Migration Partner



About ebuconnect

Long term experience with EDI / EAI / SOA / J2EE

- 6 years lead of a world wide workflow project @ Sun with 2500 users, mainly open Source
- 18 years project partner for Hewlett Packard WW – Projects up to 10.000 Users
- Project and development work for Bayer, Lufthansa*, Audi*, Porsche*, E.ON*, KBC*, Vodafone*, Deutsche Bank*, Sana Klinik Berlin, Universitätsklinik Hamburg Eppendorf, Itellium

Special skills and customer support for eGate, ICAN, JCAPS 5.x, JCAPS 6.x

- Migration Know How for SOA projects
- Deep Eclipse, Maven and open source skills

**On demand resourcing up to 15 persons
(partially former Seebeyond and Sun Microsystems architects)**

How to shift from eGate to Talend?

Scope of the transition tools

- No dependencies to eGate core product code for Talend runtime
- No emulation of existing runtime logic
- All transformed assets should be available as native Talend artefacts

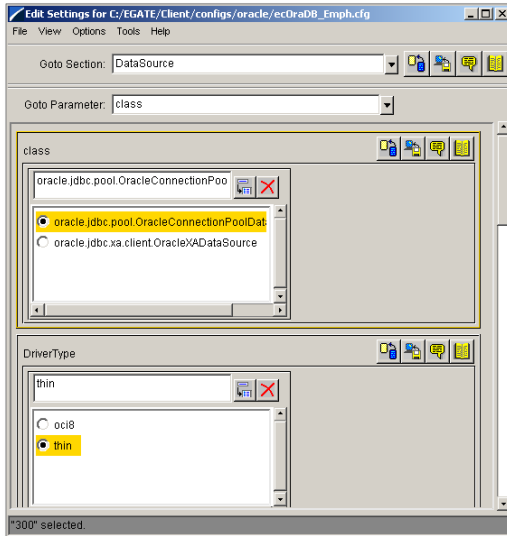
Key assets for migration

- eGate away properties and configurations -> Camel routing
- eGate custom etd -> Talend ESB XSD, JAX-B
- eGate Java Collaboration -> Java 1.6 refactored

Additional analysis

- Dependency check of published events and proposal for joined process maps and declaration of JMS topics and queues

Sample eGate Collabs

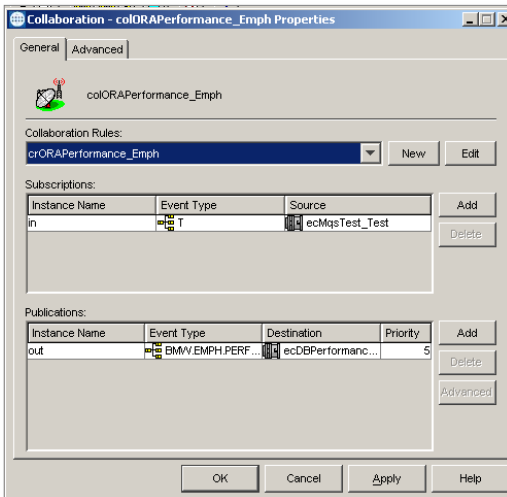


←
**plain config info
DB connection**

```

-----
#
# Delimiters To Use
#
#
File/CFG/Version:0.0/Delimi:\o012/Delimi2:\o174/Delimi3:\o075/Delimi4:\o054
#
#
# General Info:
#
#
# Version :eGate
# revision :$Revision: 1.1.1.1 $
# user :$Author: smerkel $
# modified :$Date: 2004/12/23 13:08:11 $
# creation :initial
#
#
# EWay Type
#
#
# network-protocol :<ANY>
# os-platform :<ANY>
# protocol-api-version :<ANY>
# app-protocol :<ANY>
# direction :<ANY>
#
#
# Section: DataSource
#
DataSource|class|value=oracle.jdbc.pool.OracleConnectionPoolDataSource|set=oracle.jdbc.
DataSource|DriverType|value=thin|set=oci8,thin

```



←
**plain config info
subscribe/publish**

```

EMPH, FALSE, ELEM_MONITOR_STCCMD, MONITORCAPS_MUSTSIGNON|MONITORCAPS_RCYNOTI
STCCMD, FALSE, ELEM_MONITOR_STCCMD, MONITORCAPS_MUSTSIGNON|MONITORCAPS_RCYNOTI
#
#
# Table:
#
# !REGISTRY_MESSAGE
#
#-----
#
# fields: LM, eType, ePriority, FR Struct Directory, FR Struct File,
# FR Struct Type, FR Struct Flags, FR Edit Directory,
# FR Edit file, FR Edit Filetype, FR Edit Flags,
# Editor Cmd Line
#
#-----
00000000,MESSAGE_TYPE_EVENT,0,monk_scripts/common,EventMsg.ssc, FILETYPE_BIN
EMV.EMPH.ERROR,MESSAGE_TYPE_BAD,0,, FILETYPE_UNKNOWN,0,, FILETYPE_UNKNOWN,0
EMV.EMPH.PERFORMANCE,MESSAGE_TYPE_NORMAL,0,, FILETYPE_BINTEXT,0,, FILETYPE_
GenericInEvent,MESSAGE_TYPE_NORMAL,0,monk_scripts/common,GenericInEvent.ssc
GenericOutEvent,MESSAGE_TYPE_NORMAL,0,monk_scripts/common,GenericOutEvent.s
Notification,MESSAGE_TYPE_NOTIFY,0,monk_scripts/common,NotificationMessage.s
T,MESSAGE_TYPE_NORMAL,0,, FILETYPE_BINTEXT,0,, FILETYPE_UNKNOWN,0
ecTestEvent_Test,MESSAGE_TYPE_NORMAL,0,, FILETYPE_BINTEXT,0,, FILETYPE_UNKN
#
#
# Table:
#
# !REGISTRY_COLLAB
#

```

Sample eGate Collabs

The screenshot shows the Collaboration Rules Editor for a project named 'crORAPerformance_Emph'. The interface is divided into several sections:

- Source Events:** A tree view on the left showing events like 'in [EmphMsg]', 'Header', 'MsgType', 'Payload', 'hasPayload', 'omitPayload', 'reset', 'available', 'next', 'receive', 'send', and 'rawInput'.
- Destination Events:** A tree view on the right showing events like 'out [EmphPerf]', 'EMPH_PERFORMANCE', 'GetMaxSequence', '\$DBConfiguration', 'commit', 'rollback', 'getAutoCommit', 'setAutoCommit', 'getCatalog', 'setCatalog', 'getSqlAgent', 'setSqlAgent', 'getPreparedSqlAgent', and 'setScrollTypeToScrollInsensitive'.
- Business Rules:** A tree view at the bottom left showing a rule named 'crORAPerformance_Emph' with sub-rules like 'executeBusinessRules', 'retBoolean', and a 'try' block containing 'if unmarshal error', 'ignore message', 'get next sequence', 'get db cursor', 'copy data to message table', and 'db insert'.
- Rule Properties:** A panel at the bottom right showing the 'Rule Properties' for the selected rule. The description is 'copy data to message table'. The rule source code is visible, showing a sequence of 'getout()' and 'set()' calls for various performance-related fields.

Inbound Event

Outbound Event

Collaboration Rules

Rule Source

Sample eGate Collabs

eGate Java Source (JRE 1.3.1)

```
public boolean executeBusinessRules() throws Exception {
    {
        boolean retBoolean = true;
        try
        {
            if (unmarshalError)
            {
                unmarshalError=false;
            }
            else
            {
                // Neue Version AB 22.11.2004 Ermittlung der Sequence über das gleiche Verfahren wie bei crORAError, also mit einem
                String sWhere = "UNIQUEID="+getin().getHeader().getGUID()+" " and sequence = (select max (b.sequence) from emp
                getout().getEMPH_PERFORMANCE(ResultSet.TYPE_SCROLL_SENSITIVE, ResultSet.CONCUR_UPDATABLE).select(sWhere);
                if (getout().getEMPH_PERFORMANCE().next()) {
                    sequenceCounter=getout().getEMPH_PERFORMANCE().getSEQUENCE() + 1;
                }
                else {
                    // initially set to 1.
                    sequenceCounter=1;
                }
                getout().getEMPH_PERFORMANCE(ResultSet.TYPE_SCROLL_SENSITIVE, ResultSet.CONCUR_UPDATABLE).select("1=0");
                getout().getEMPH_PERFORMANCE().moveToInsertRow();
                getout().getEMPH_PERFORMANCE().setSEQUENCE(sequenceCounter);
                getout().getEMPH_PERFORMANCE().setSCHEMAID(StringUtils.trimBoth(getin().getHeader().getSchemaID(), " "));
                getout().getEMPH_PERFORMANCE().setUNIQUEID(StringUtils.trimBoth(getin().getHeader().getGUID(), " "));
                getout().getEMPH_PERFORMANCE().setTIMESTAMP(string2date(getin().getHeader().getMsgDate(),getin().getHeader().getMsgT
                getout().getEMPH_PERFORMANCE().setDATEI(StringUtils.trimBoth(getin().getHeader().getMsgDate(), " "));
                getout().getEMPH_PERFORMANCE().setTIMEI(StringUtils.trimBoth(getin().getHeader().getMsgTime(), " "));
                getout().getEMPH_PERFORMANCE().setMODULE(StringUtils.trimBoth(getin().getHeader().getModuleName(), " "));
                getout().getEMPH_PERFORMANCE().setCOLLABORATION(StringUtils.trimBoth(getin().getHeader().getCollName(), " "));
                getout().getEMPH_PERFORMANCE().setVORCOLLABORATION(StringUtils.trimBoth(getin().getHeader().getVorColNames(), " "));
                getout().getEMPH_PERFORMANCE().setCOLLABORATIONRULE(StringUtils.trimBoth(getin().getHeader().getColRuleName(), " "));
            }
        }
    }
}
```



Talend J2EE Source (JDK 5)

```
public boolean executeBusinessRules() throws Exception
{
    final boolean retBoolean = true;
    try
    {
        if (unmarshalError)
        {
            unmarshalError = false;
        }
        else
        {
            if (Boolean.TRUE)
            {
                final String sWhere = "UNIQUEID="+ getin().getHeader().getGuiID() + " "
                + " and sequence = (select max (b.sequence) from emp_performance b where b.UNIQUEID="+
                + getin().getHeader().getGuiID() + " "';
                getout().getEMPH_PERFORMANCE(ResultSet.TYPE_SCROLL_SENSITIVE, ResultSet.CONCUR_UPDATABLE).select(sWhere);
                if (getout().getEMPH_PERFORMANCE().next())
                {
                    sequenceCounter = getout().getEMPH_PERFORMANCE().getSEQUENCE() + 1;
                }
                else
                {
                    sequenceCounter = 1;
                }
                getout().getEMPH_PERFORMANCE(ResultSet.TYPE_SCROLL_SENSITIVE, ResultSet.CONCUR_UPDATABLE).select("1=0");
            }
            getout().getEMPH_PERFORMANCE().moveToInsertRow();
            getout().getEMPH_PERFORMANCE().setSEQUENCE(sequenceCounter);
            getout().getEMPH_PERFORMANCE().setSCHEMAID(StringUtils.trimBoth(getin().getHeader().getSchemaID(), " "));
            getout().getEMPH_PERFORMANCE().setUNIQUEID(StringUtils.trimBoth(getin().getHeader().getGuiID(), " "));
            getout().getEMPH_PERFORMANCE().setTIMESTAMP(getin().getHeader().getMsgDate(), getin().getHeader().getMsgTime());
            getout().getEMPH_PERFORMANCE().setDATEI(getin().getHeader().getMsgDate());
            getout().getEMPH_PERFORMANCE().setTIMEI(getin().getHeader().getMsgTime());
            getout().getEMPH_PERFORMANCE().setMODULE(StringUtils.trimBoth(getin().getHeader().getModuleName(), " "));
        }
    }
}
```


Migration of eGate to Talend ESB runtime

eGate Sample as Talend ESB Project

The screenshot shows the Eclipse IDE interface. On the left, the Package Explorer displays a project structure with packages like `com.isd.collab.test` and `com.isd.common.collab`. The main editor shows the source code for `DataBaseTest.java`. The code defines an abstract class `DataBaseTest` that extends `TestCase` and contains several static fields for database connection details and a logger.

```

package com.isd.collab.test;

import java.sql.Connection;

public abstract class DataBaseTest extends TestCase
{
    private DataSource dataSource;

    private final static String SERVER = "localhost";

    private final static String DATA_BASE = "bmw";

    private final static String USER = "bmw";

    private final static String PASSWORD = "bmw";

    protected final Logger log;

    public DataBaseTest( final String name )
    {
        super( name );
        log = LoggerFactory.getLogger( name );
    }
}

```

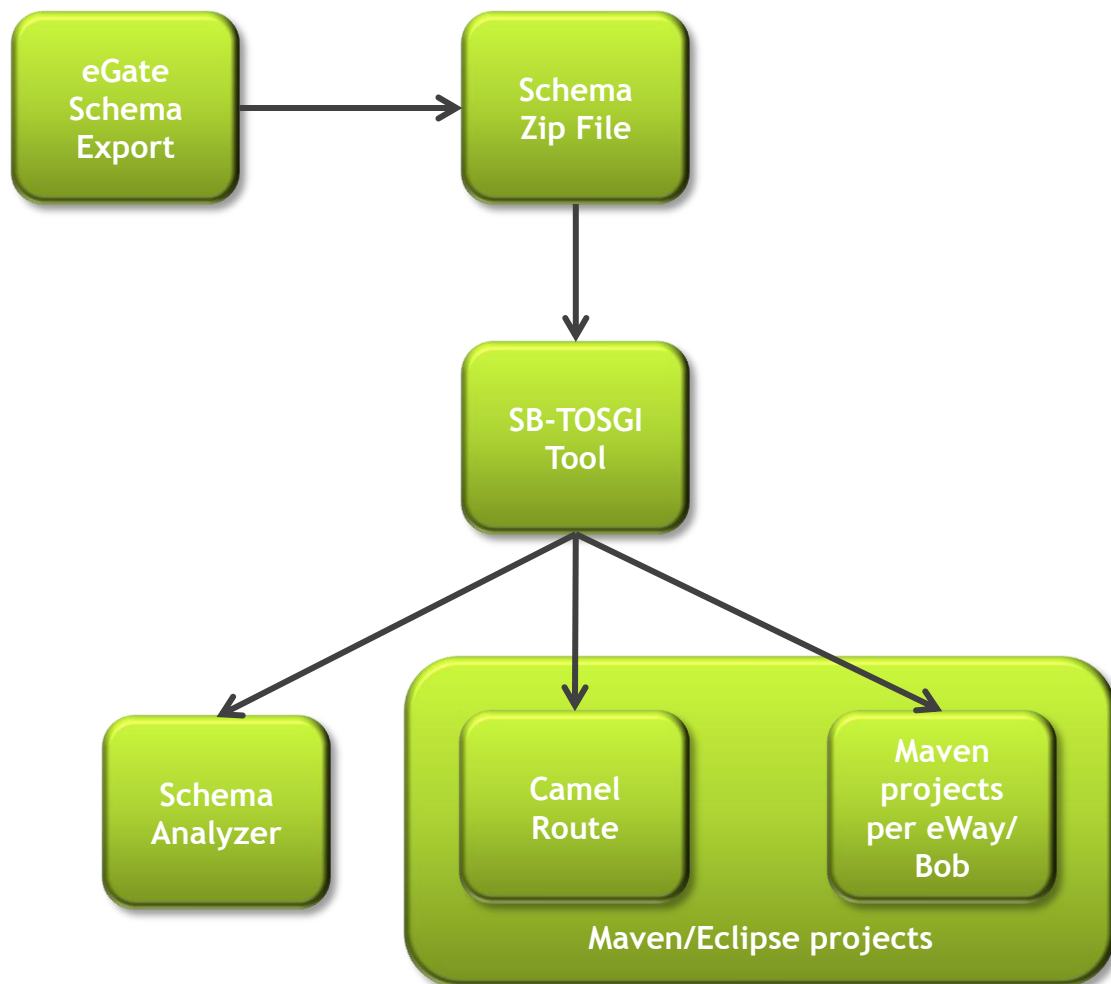
At the bottom, the Console window shows the following output:

```

<terminated> TestCollab [JUnit] C:\Programme\Java\jdk1.6.0_25\bin\javaw.exe (20.05.2011 00:21:43)
2011-05-20 00:21:44,190 DEBUG [main] : creating DataSource
2011-05-20 00:21:44,800 DEBUG [main] : Preparing statement: SELECT uniqueid,s
2011-05-20 00:21:44,841 DEBUG [main] : Preparing statement: SELECT uniqueid,s
2011-05-20 00:21:44,851 DEBUG [main] : Preparing statement: INSERT INTO emph_

```

General Migration Flow



- **Customer artefacts as input (eWay, bob, Configurations)**
- **Migration of data flow and event points into camel route configuration**
- **Migration of etd and Java Collaboration into XSD/beans and JDK 5 code for Talend ESB**

Special Features

Transformation of etd into XSD and native java beans (pojo)

- Advantage XSD -> easy maintenance
- Advantage beans -> memory requirements in runtime environment

Code refactoring and definition of functional code patterns and replacement directive

- Allows functional enhancements based on JDK 5
- Transfer option into generic EAI classes

Generated message description format compatible to Eclipse DI objects (e.g. SAP message objects) *

- Format description can be changed dynamically by TIS DI remote repository update*

* To be verified after plugin availability (beta in Q3/2011)

Roadmap Seebeyond 2 Talend

- Transformation of eGate eWay and bob export files to Talend artefacts -> June 2011 -> beta test
- Transformation of repository style JCAPS 5.x / 6.x project exports to Talend artefacts -> July 2011 -> beta test
- GA SB-OSGI Migration Toolkit by Q1 2012
- **Already in place**
 - edibbeans for UN/EDIFACT transformation
 - X.400 Connection Software via SOAP and File interface for Business Mail 400