

WebSphere Message Broker CICS Request Node



Message Broker Product Roadmap



- Support for Microsoft™ .NET environments
- Data Format Description Language (DFDL)
- Graphical data mapper
- Enhanced auditing of data with record and replay
- Web administration and REST API
- Integration with IBM® Sterling Connect: Direct
- A new Hypervisor Edition for IBM AIX®
- A tiered pricing model including the new Express® Edition
- Support for Web Services Reliable Messaging (WS-RM)

- Simple & Productive
- Universal & Independent
- Industry Specific & Relevant
- Dynamic & Managed
- High Performing & Scalable

V.Next

MB V8.0.0.1
Q2 2012

HCP V8
2H 2012

**Message
Broker V8**
Q4 2011

HCP Fixpack 2
Q1 2012

- Analytics
- HL7 enhancements
- Document handling
- Extended devices

MB V7.0.0.3
Q2 2011

HCP Fixpack 1
Q3 2011

- Expanded connectivity

- More countries and platforms

MB V7
Q4 2009

**Healthcare
Connectivity
Pack V7.0**
Q1 2011

- HL7 Application connectors
- HL7 Connectivity Patterns
- Operational Management Tooling



Major release

Minor release

IBM's plans, directions, and intent are subject to change or withdrawal

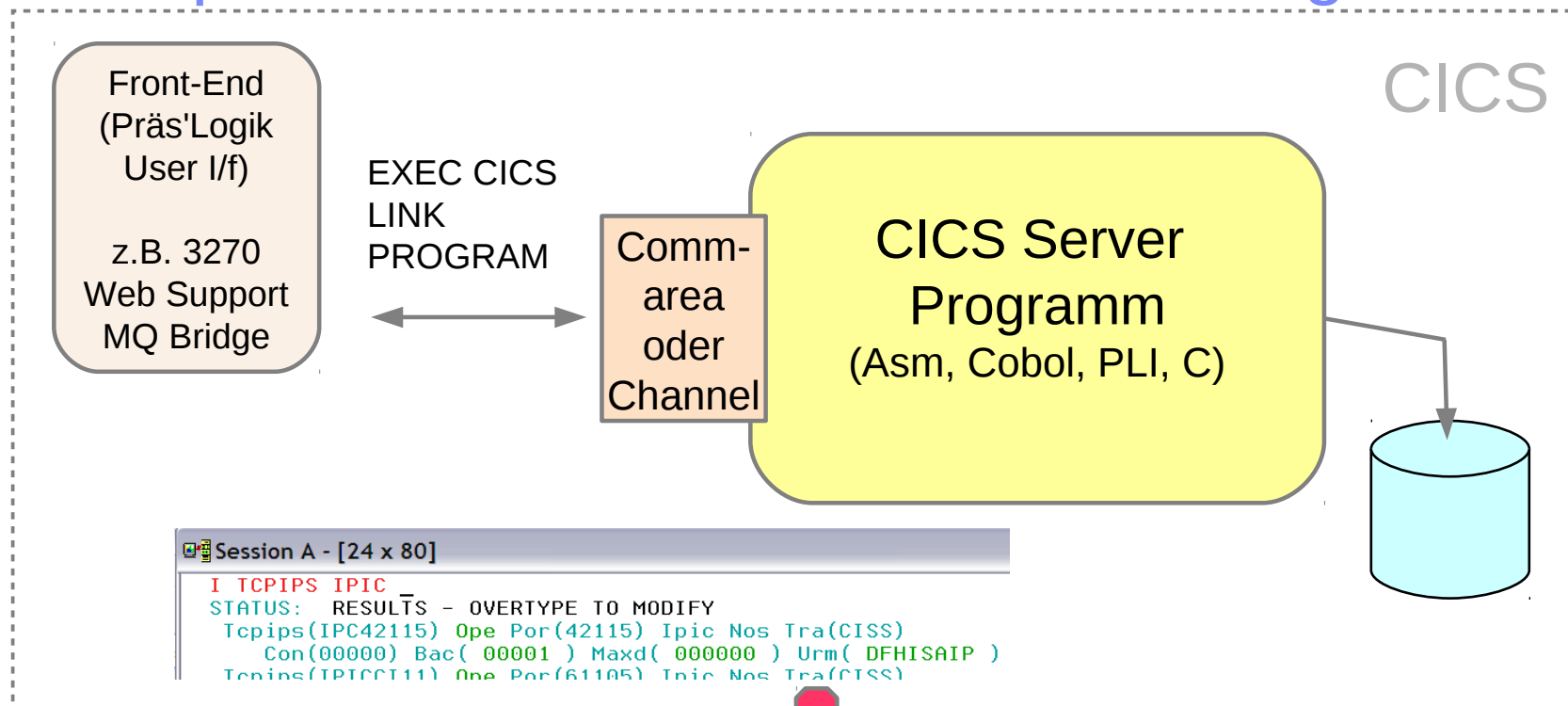
WebSphere Message Broker 8.0.0.1 Highlights

- **High performing** - Built-in WebSphere Extreme Scale global cache for highly available and scalable data sharing
- **Better integration for WebSphere Application Server** Users including Toolkit and Admin Console with new Web Service creation
- **Improved web administration**: Role based access to view/control resources plus deployment of patterns from
- **Mobile enabled** enterprise applications - IBM Worklight mobile services patterns
- **Closer integration with InfoSphere** - Data lineage tools to understand the origin and history of data elements
- **Easier to adopt** - JAXB supports intuitive development. Big aid to migrating users of other Integration engines eg eGate/JCAPS migrations.
- **Enhanced Industry support**: ISO-8583 samples & other DFDL and data mapping improvements
- **Support for WebSphere MQ 7.1 and 7.5**



And Much More... !

CICS Request Node – CICS Voraussetzungen



CICS IPIC Connection



- irgendein "Requester" (Client) kann über den Broker den CICS "Service" aufrufen
- Broker kann sich direkt an den IPIC Port des CICS connecten

CICS Request Node Properties

Properties Problems Deployment Log

CICS Request Node Properties - CICS Request

Description

Basic

Request CICS server*

Result

Response Program name*

Parser Data structure ☒ Commarea ☐ Channel

Validation Commarea length*

Monitoring Security identity

Request timeout (secs)

Mirror transaction ID

Set EIBTRNID only ☐

CICS IPIC Port kann als url oder symbolisch, als "Configurable Service" angegeben werden

ebenso kann der Server-Programmname fest oder dynamisch vergeben werden

die CICS Transaktion, unter welcher der Aufruf läuft (Default: CPMT / CSMI)

Description

Request

Result Program name override location

Response Message Parsing

Basic

Request

Result

Response Message Parsing

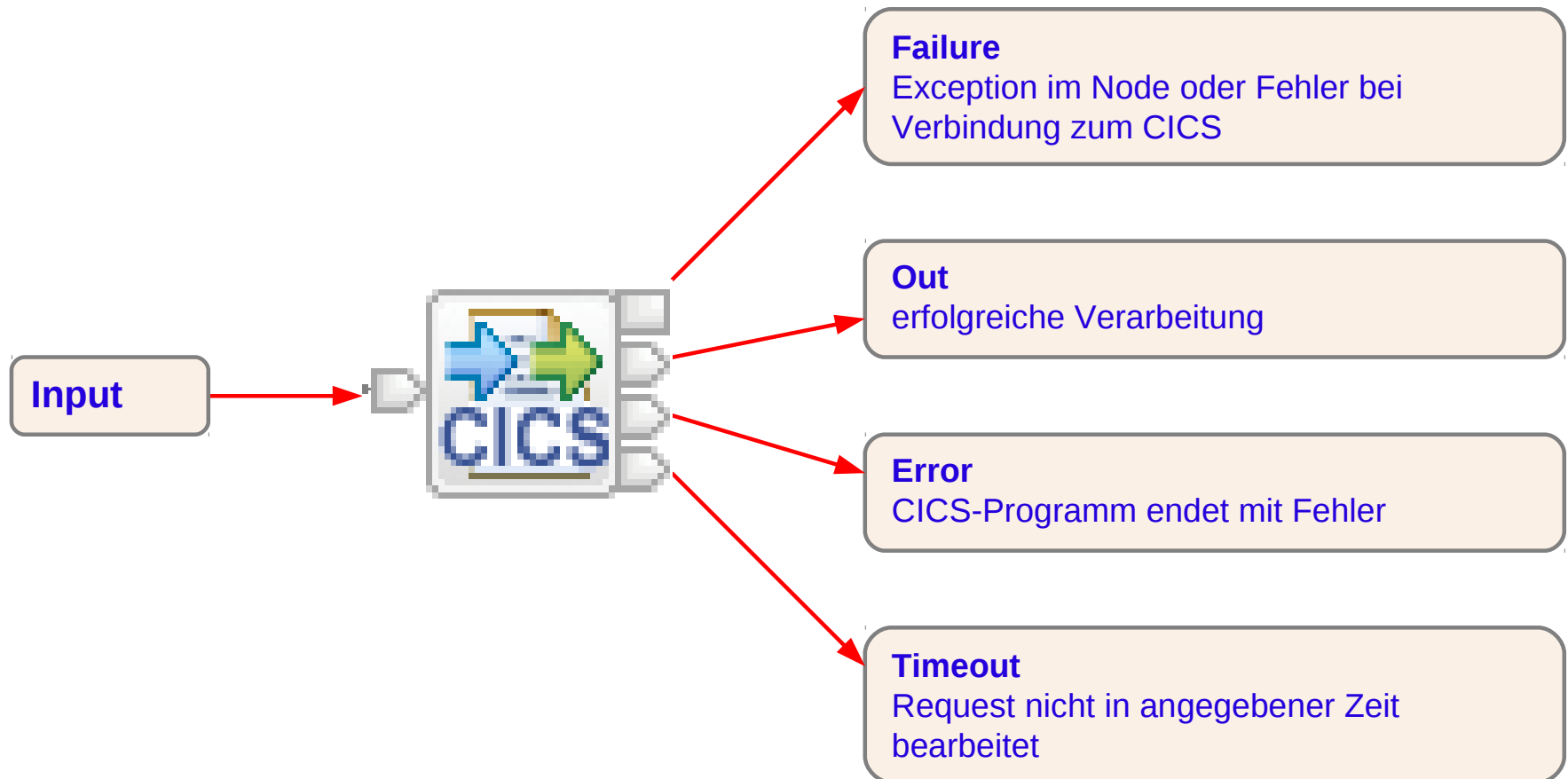
Parser Options

Result data location*

Output data location

Copy local environment ☒

CICS Request Node - Terminals



Die CICS Sample FILEA Anwendung

```
Session A - [24 x 80]
OPERATOR INSTRUCTIONS

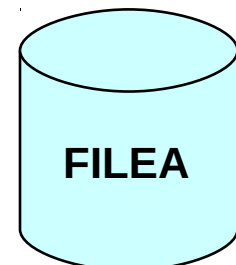
OPERATOR INSTR - ENTER AMNU
FILE INQUIRY   - ENTER AINQ AND NUMBER
FILE BROWSE    - ENTER ABRW AND NUMBER
FILE ADD       - ENTER ADD AND NUMBER
FILE UPDATE    - ENTER AUPD AND NUMBER

PRESS CLEAR TO EXIT
ENTER TRANSACTION: AINQ NUMBER 000100
```

```
Session A - [24 x 80]
FILE INQUIRY

NUMBER: 000100
NAME:   S. D. BORMAN
ADDRESS: SURREY, ENGLAND
PHONE:  32156778
DATE:   26 11 81
AMOUNT: $0100.11
COMMENT: *****

PRESS ENTER TO CONTINUE
```



- standard Frontend: BMS 3270
- VSAM File FILEA mit 80-stelligen Datenrecords
- “Business Logik” und Datenzugriff durch Commarea- Programm DFHVAXCS

Die CICS Sample FILEA Anwendung - COMMAREA

Session A - [24 x 80]

OPERATOR INSTRUCTIONS

OPERATOR INSTR - ENTER AMNU

FILE INQUIRY - ENTER AINQ AND NUMBER
FILE BROWSE - ENTER ABRW AND NUMBER
FILE ADD - ENTER AADD AND NUMBER
FILE UPDATE - ENTER AUPD AND NUMBER

PRESS CLEAR TO EXIT

Session A - [24 x 80]

FILE INQUIRY

NUMBER: 000100
NAME: S. D. BORMAN
ADDRESS: SURREY, ENGLAND
PHONE: 32156778
DATE: 26 11 81
AMOUNT: \$0100.11
COMMENT: *****

PRESS ENTER TO CONTINUE

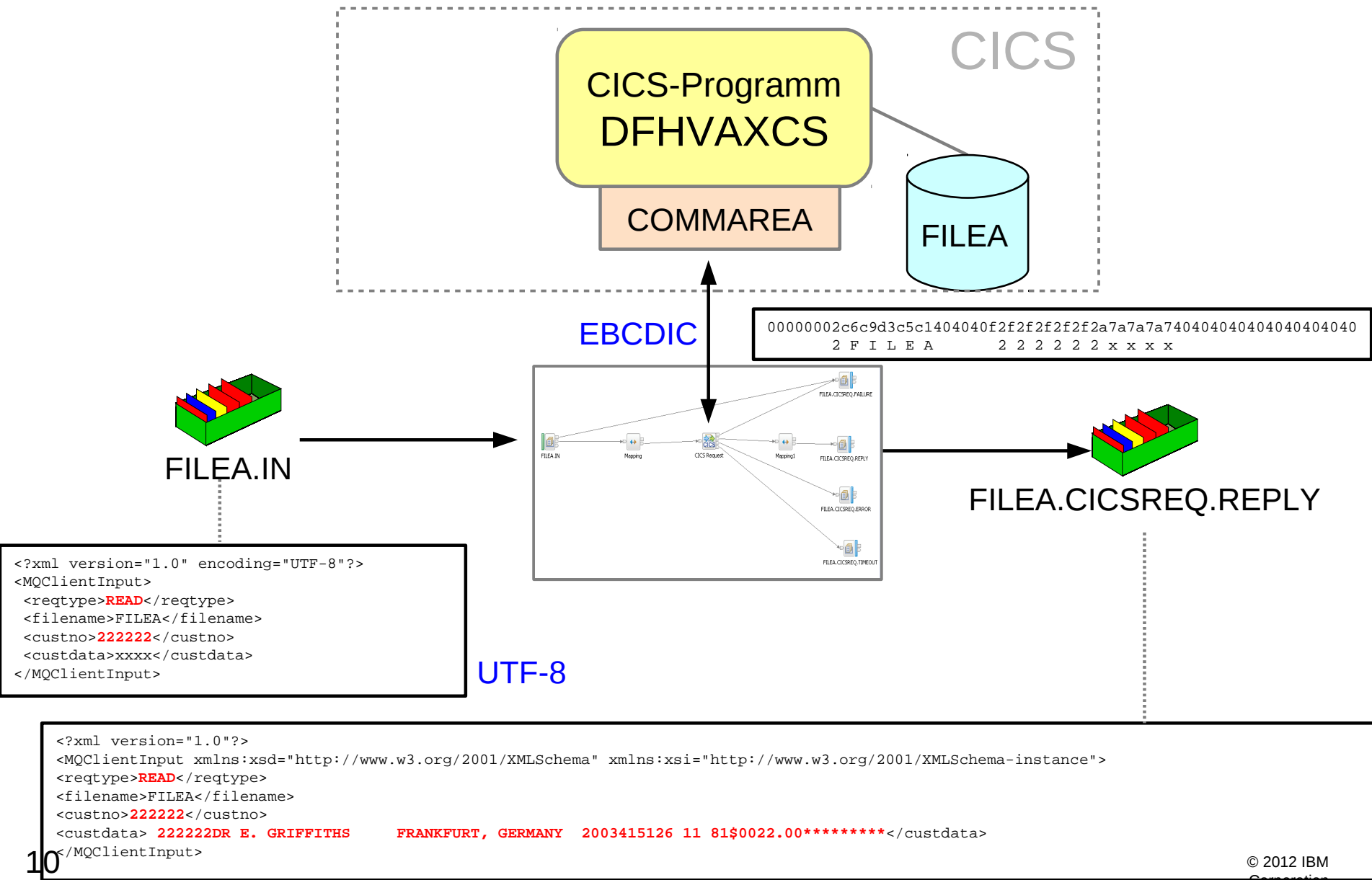
```
01 FILEA-COMMAREA.
  05 COMM-CODE
  05 COMM-FILE
05 COMM-RID
  05 COMM-REC.
```

```
PIC S9(9) BINARY.
PIC X(8) VALUE 'FILEA '.
PIC X(6).
```

```
*
* COMMCODES:
* '1' >> OPEN FILE
* '2' >> READ ENTRY
* '3' >> CLOSE FILE
* '4' >> WRITE ENTRY
*
```

```
10 REC-STAT          PIC X(1)  VALUE SPACES.
10 REC-ID            PIC X(6)  VALUE SPACES.
10 REC-NAME          PIC X(20) VALUE SPACES.
10 REC-ADDRESS       PIC X(20) VALUE SPACES.
10 REC-PHONE         PIC X(8)  VALUE SPACES.
10 REC-DATE          PIC X(8)  VALUE SPACES.
10 REC-AMOUNT        PIC X(8)  VALUE SPACES.
10 REC-COMMENT       PIC X(9)  VALUE SPACES.
```


CICS Request Node – Beispiel1



- WMB V8 introduces the concepts of Applications and Libraries as means of developing, deploying and managing your integration solutions



WMB 8.0



Application

- means of encapsulating resources to solve a specific connectivity problem
- application can reference one or more libraries



Library

- a logical grouping of related routines and/or data
- libraries help with reuse and ease of resource management
- library can reference one or more libraries

- These concepts span all aspects of the Toolkit and broker runtime, and are designed to make the development and management of WMB solutions easier.

- WMB V8.0.0.1 introduces Service concept as means of developing, deploying and managing your service-oriented integration solutions.

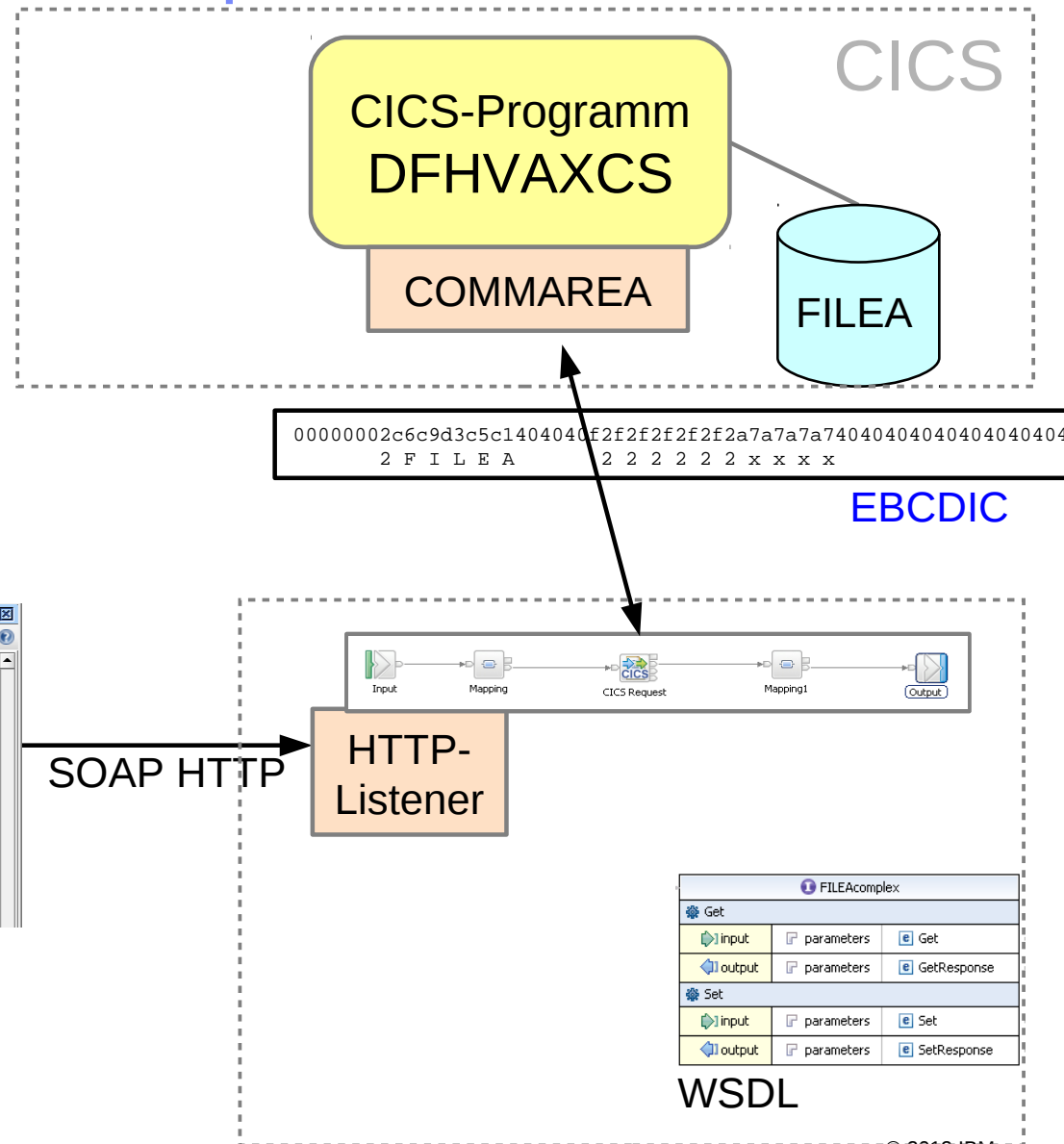


Service

WMB 8.0.0.1

- An application with a well-defined interface
 - ✓ Service interface is expressed via WSDL with a port type
 - ✓ Service interface gives *service* application a structure!
 - Services promote encapsulation and isolation for service-oriented integration solutions
 - Service can reference one or more libraries
 - Binding must be specified for successful deployment
 - ✓ default binding is created out of the box
- Services span all aspects of the Toolkit and broker runtime, and are designed to make the development and management of service-oriented solutions easier in WMB.

CICS Request Node – Beispiel2 WebService



UTF-8

```

Request 1
http://localhost:7800/
<?xml version='1.0' encoding='UTF-8'>
<soapenv:Envelope xmlns:soapenv='http://schemas.xmlsoap.org/soap/envelope/'>
  <soapenv:Header/>
  <soapenv:Body>
    <fil:Get>
      <Id>222222</Id>
    </fil:Get>
  </soapenv:Body>
</soapenv:Envelope>
  
```