

WebSphere Message Broker CICS Request Node



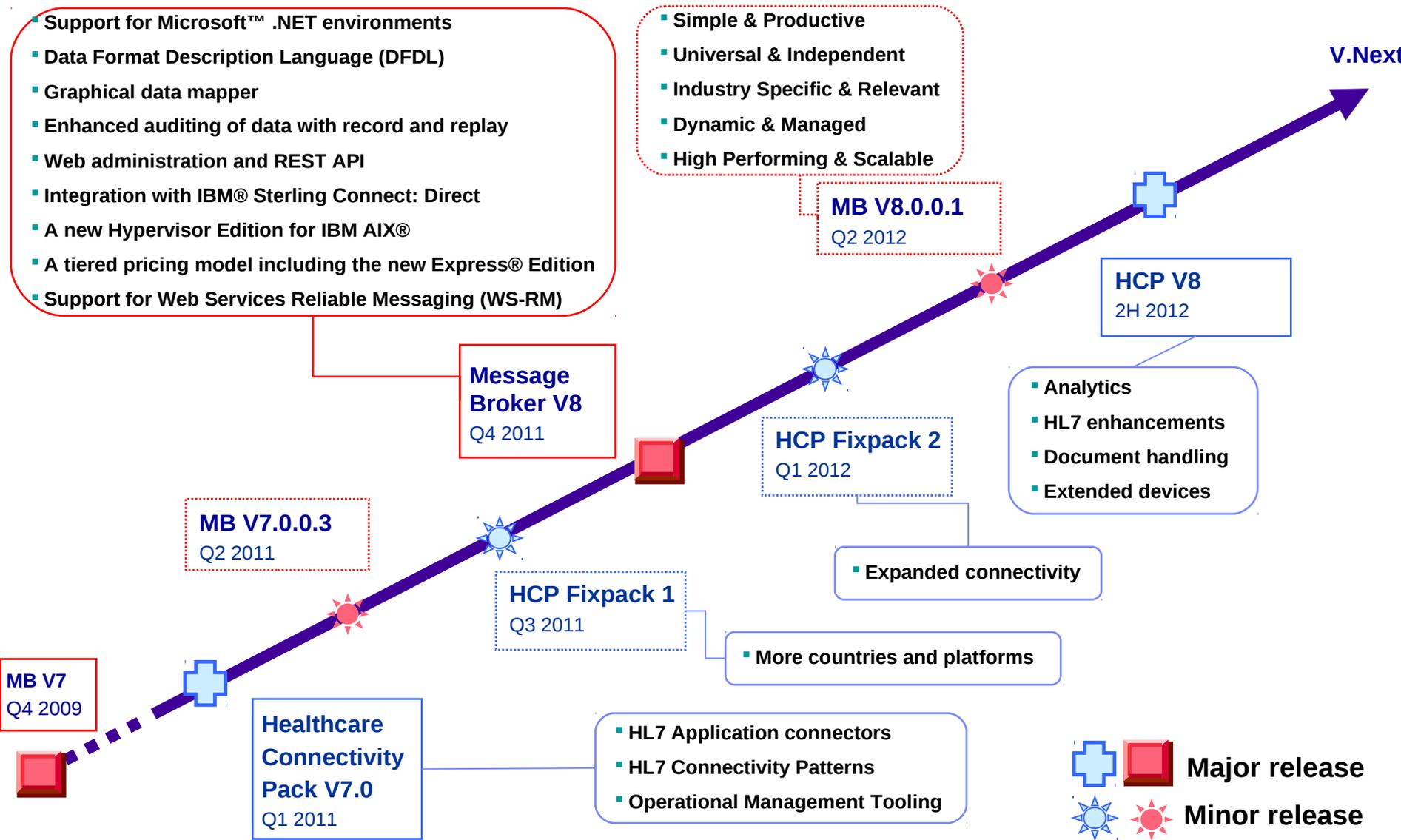
Message Broker Product Roadmap



- 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



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

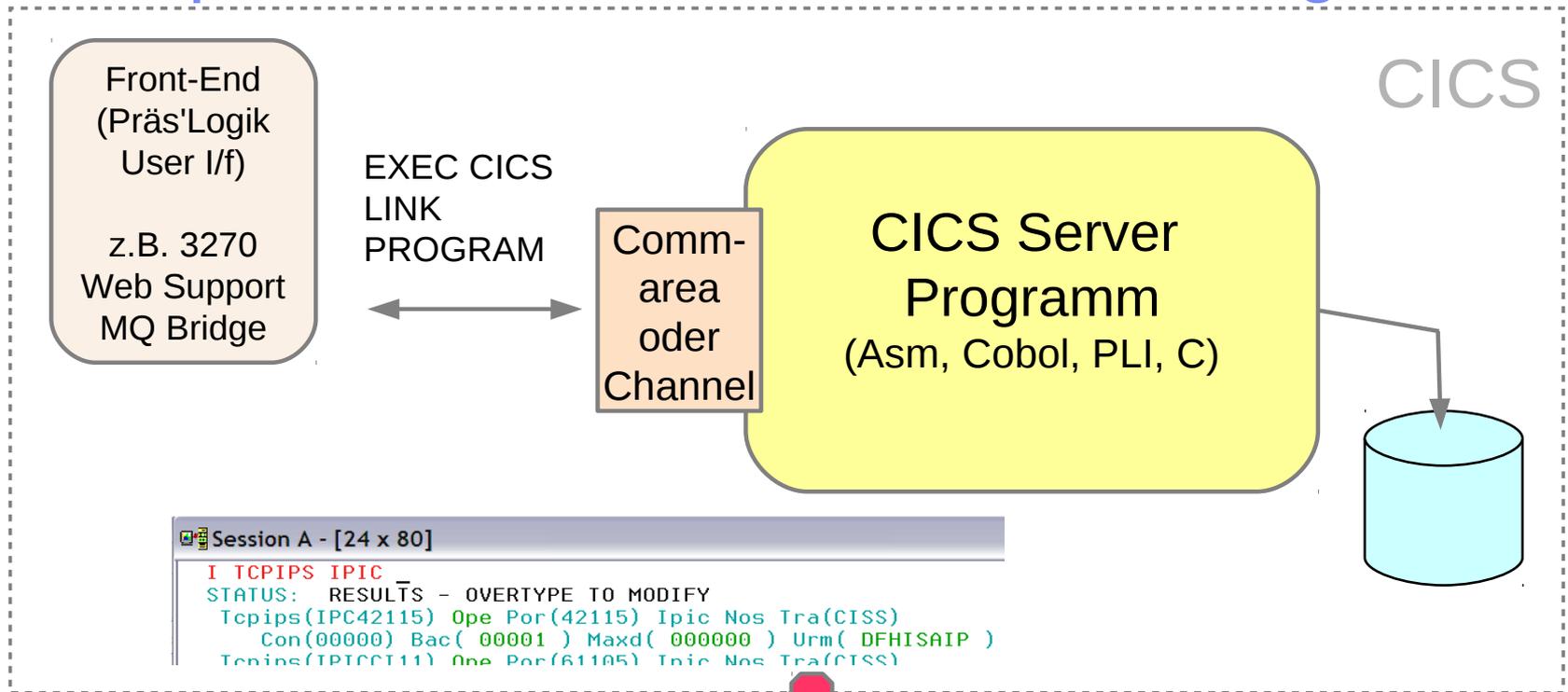
WebSphere Message Broker 8.0.0.1 Highlights

- **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**

**New!**

And Much More... !

CICS Request Node – CICS Voraussetzungen



```

Session A - [24 x 80]
I TCPIPS IPIC
STATUS: RESULTS - OVERTYPE TO MODIFY
Tcpipls(IPC42115) Ope Por(42115) Ipic Nos Tra(CISS)
Con(00000) Bac( 00001 ) Maxd( 000000 ) Urm( DFHISAIP )
Tonins(IPIC111) Ope Por(61105) Ipic Nos Tra(CISS)
    
```

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 CICS Request Node Properties - CICS Request

Description

Basic

Request CICS server*

Result *e.g. tcp://cicsserver.com:11111 or CICSConnect*

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: CPMI / CSMI)

Description

Basic

Request

Result

Response Message Parsing

Data location*

Program name override location

Basic

Request

Result

Response Message Parsing

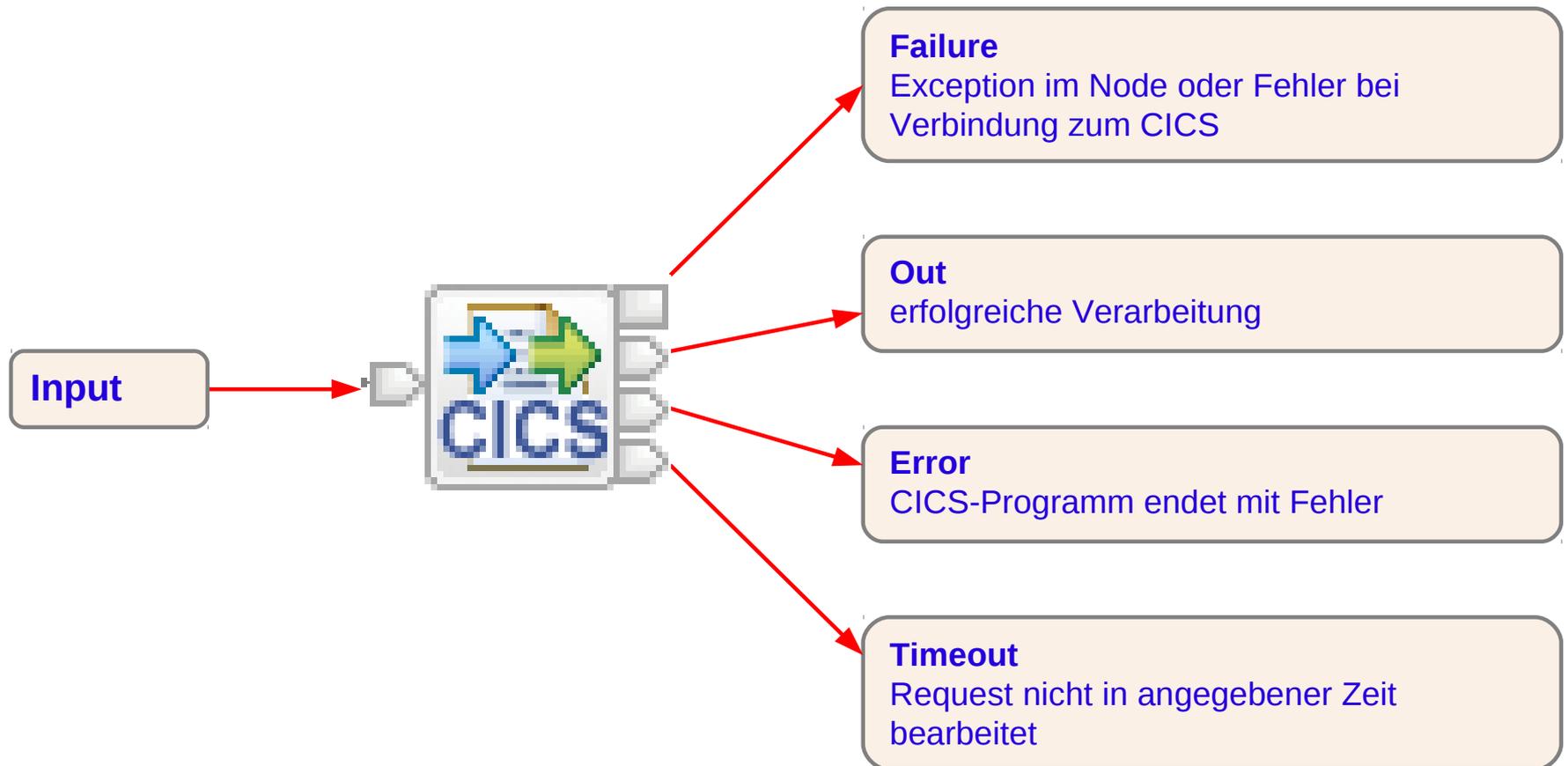
Parser Options

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
    
```

```

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
*
    
```

PRESS CLEAR TO EXIT

```

Session A - [24 x 80]
FILE INQUIRY

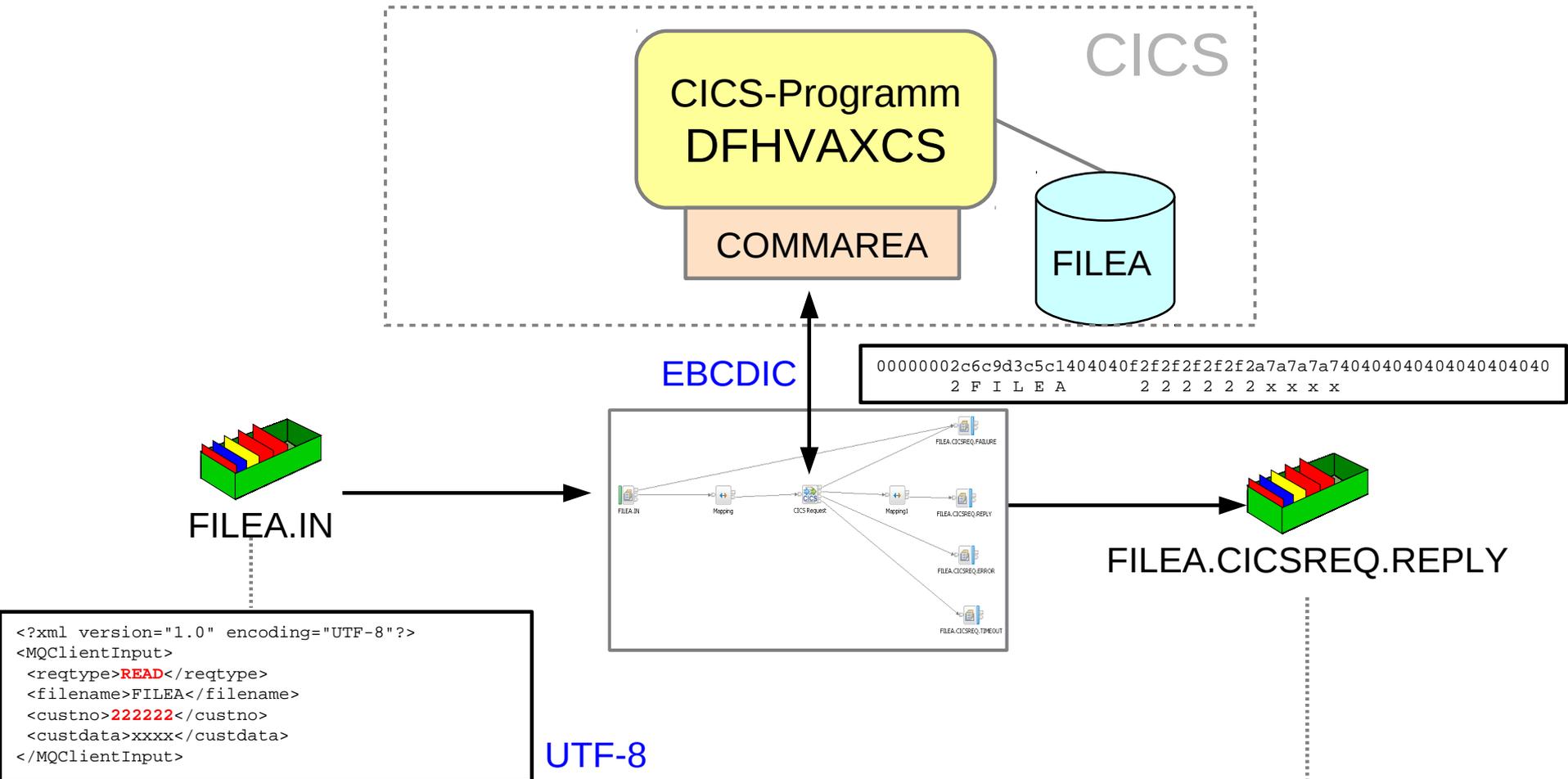
NUMBER: 000100
NAME:   S. D. BORMAN
ADDRESS: SURREY, ENGLAND
PHONE:  32156778
DATE:   26 11 81
AMOUNT: $0100.11
COMMENT: *****
    
```

```

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.
    
```

PRESS ENTER TO CONTINUE

CICS Request Node – Beispiel1



```
00000002c6c9d3c5c1404040f2f2f2f2f2f2a7a7a7a7404040404040404040
  2 F I L E A      2 2 2 2 2 2 x x x x
```

UTF-8

```
<?xml version="1.0"?>
<MQClientInput xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <reqtype>READ</reqtype>
  <filename>FILEA</filename>
  <custno>22222</custno>
  <custdata> 22222DR E. GRIFFITHS      FRANKFURT, GERMANY  2003415126 11 81$0022.00*****</custdata>
</MQClientInput>
```

- 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.

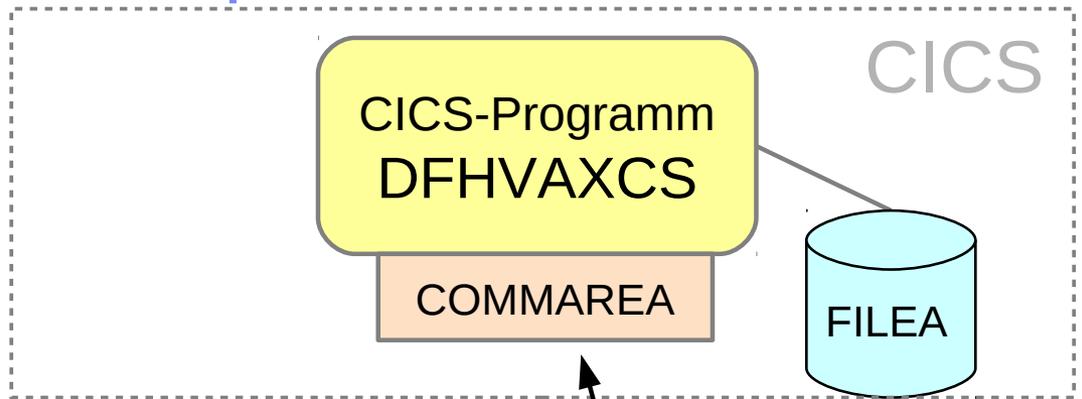


Service



- 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.

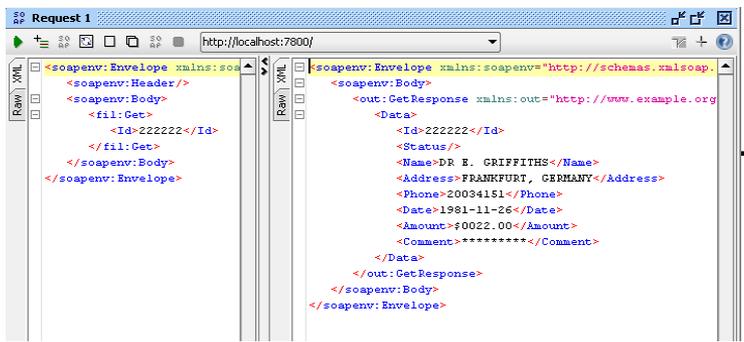
CICS Request Node – Beispiel2 WebService



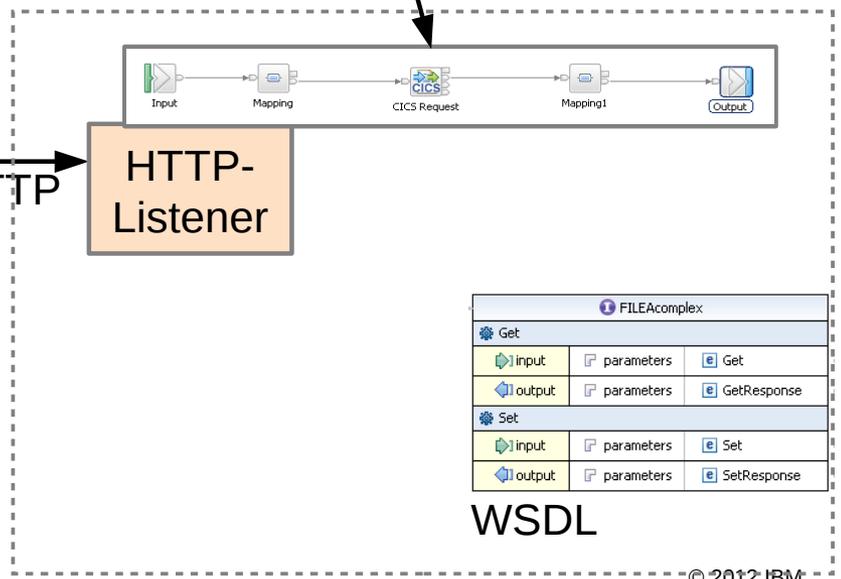
00000002c6c9d3c5c1404040f2f2f2f2f2f2a7a7a7a7404040404040404040404040
2 F I L E A 2 2 2 2 2 2 x x x x

EBCDIC

UTF-8



SOAP HTTP



FILEAcomplex			
Get			
input	parameters	Get	
output	parameters	GetResponse	
Set			
input	parameters	Set	
output	parameters	SetResponse	