

IBM Software Group

# Enterprise Service Bus

## Options de mise en œuvre

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WebSphere Business Integration solution specialist



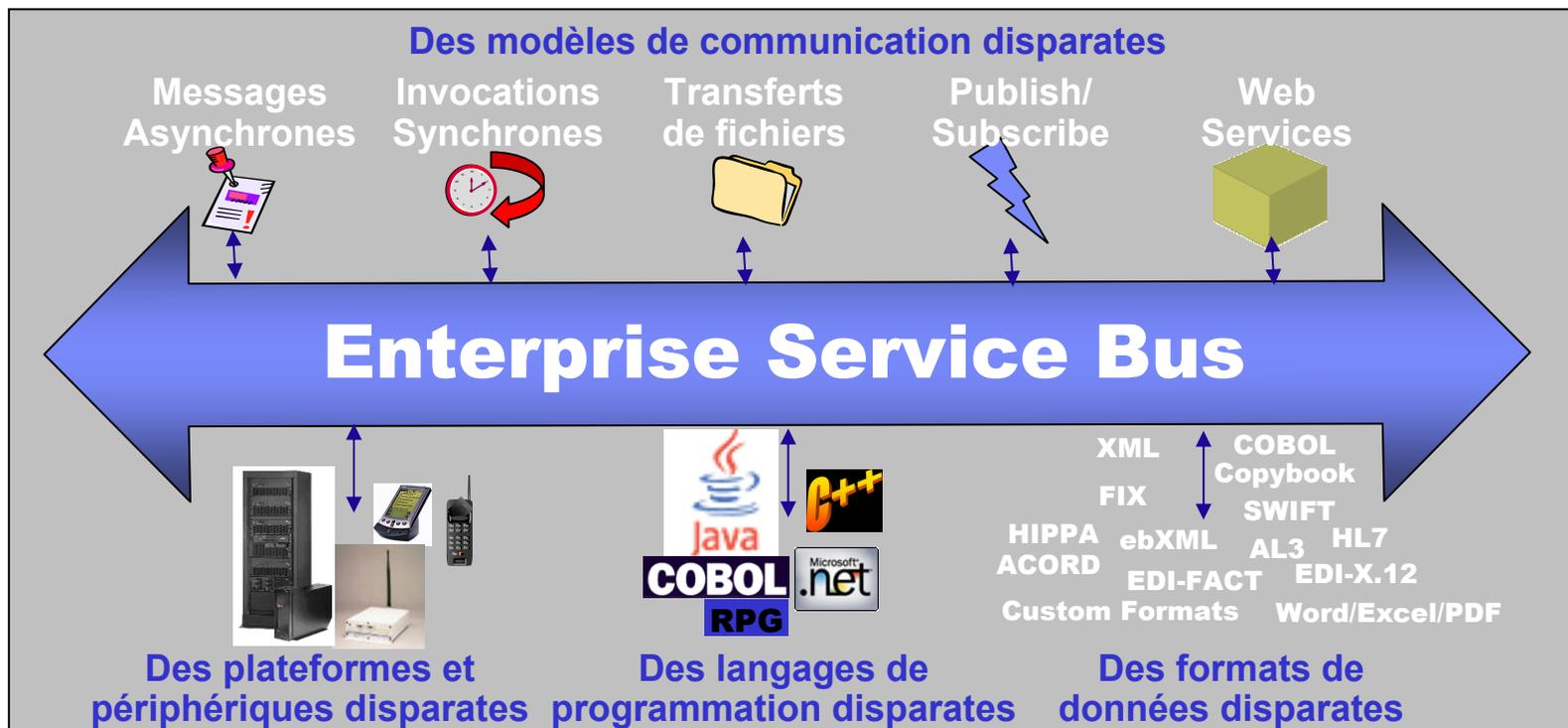
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# L'approche

Une « architecture » de communication permettant à des applications

- s'exécutant sur des plateformes ou périphériques différents
- ou bien implémentées dans des langages de programmation différents
- ou bien s'appuyant sur des modèles de programmation différents
- ou bien exploitant des modèles de données différents

de communiquer entre elles en minimisant l'impact sur l'existant



# Les besoins

- Invocation de service



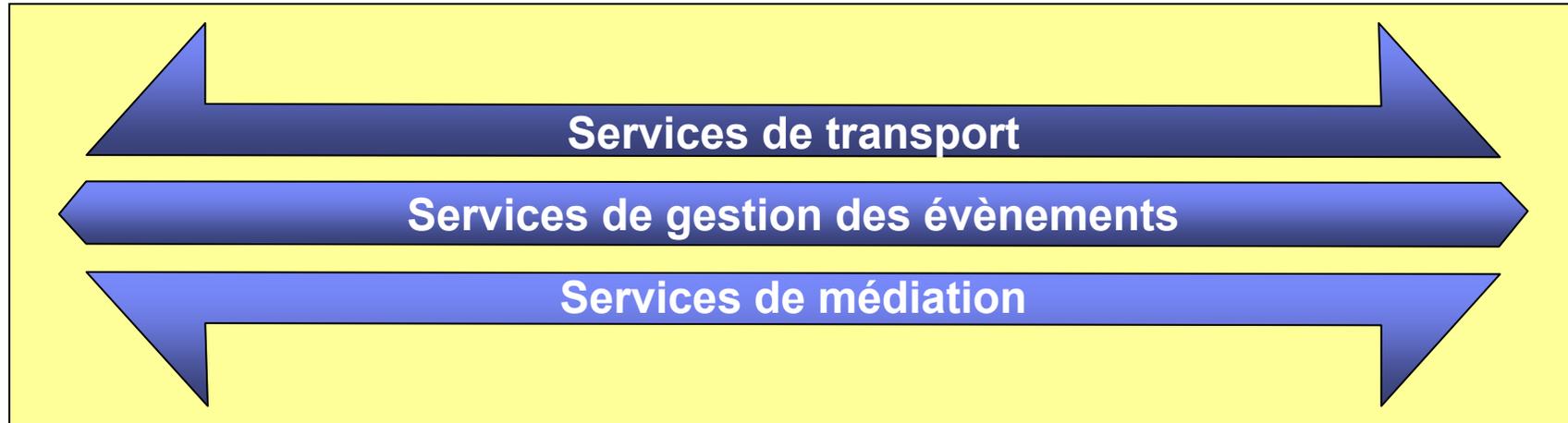
- Echange de messages (Push)



- Gestion d'abonnements (Pull)



# Les services de connectivité



## Transport

- ✓ Garanti
  - ✓ Sécurisé
  - ✓ Pilotable
  - ✓ Rejouable
  - ✓ Transactionnel
- en fonction des besoins

## Evènements

- ✓ Détection
- ✓ Déclenchement
- ✓ Propagation
- ✓ Cas complexes (CEP)

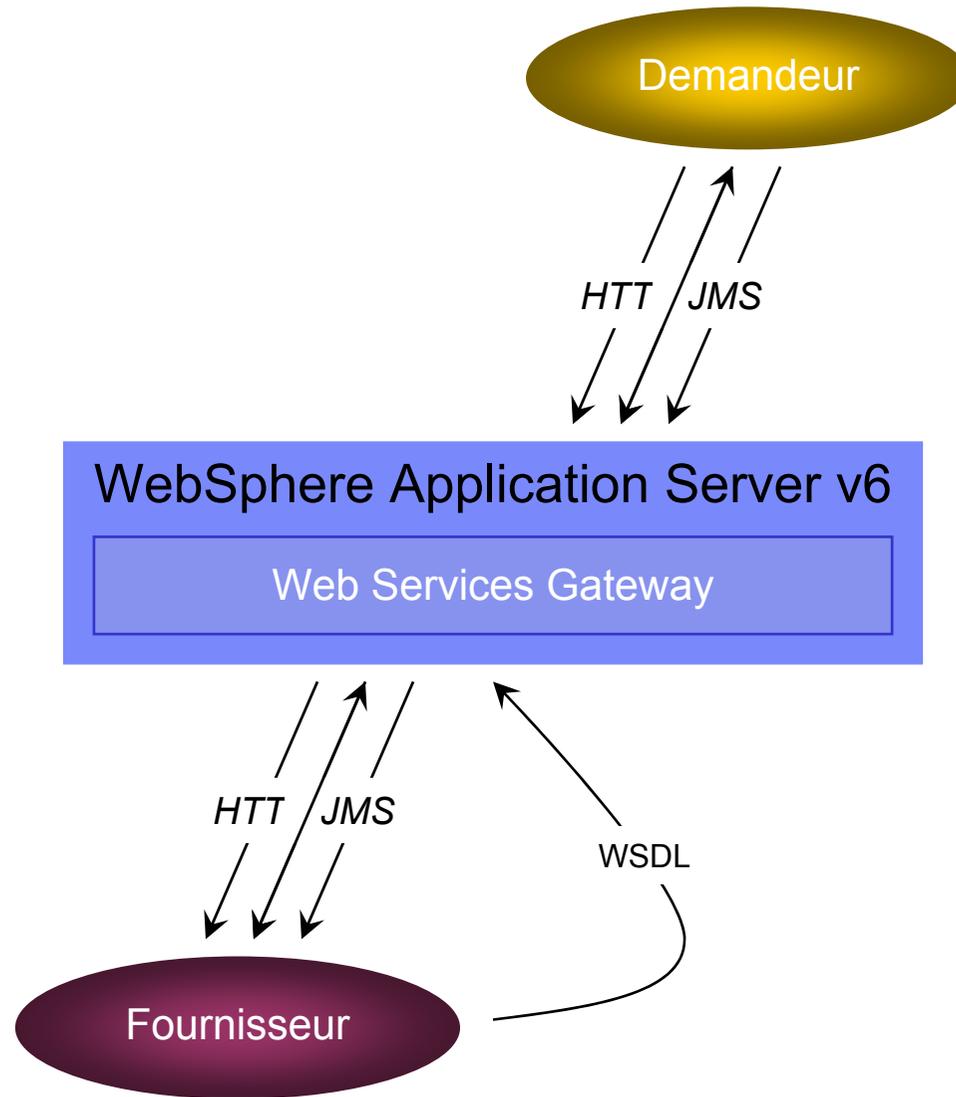
## Médiation

- ✓ Routage
- ✓ Chgt de format
- ✓ Enrichissement
- ✓ Chgt de protocole



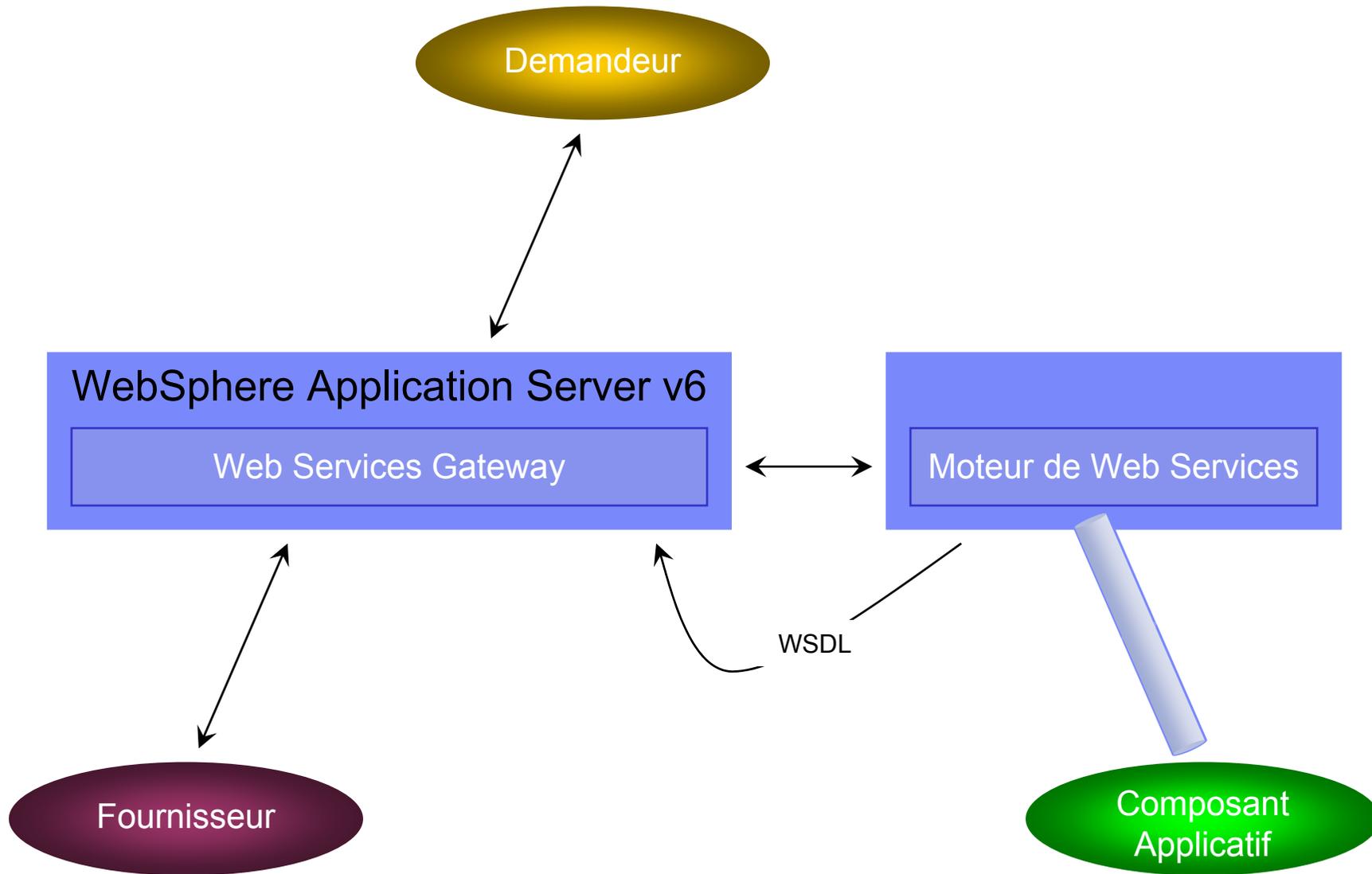
• Invocation de service

Processus client    Annuaire des services    Paquet    Processus serveur



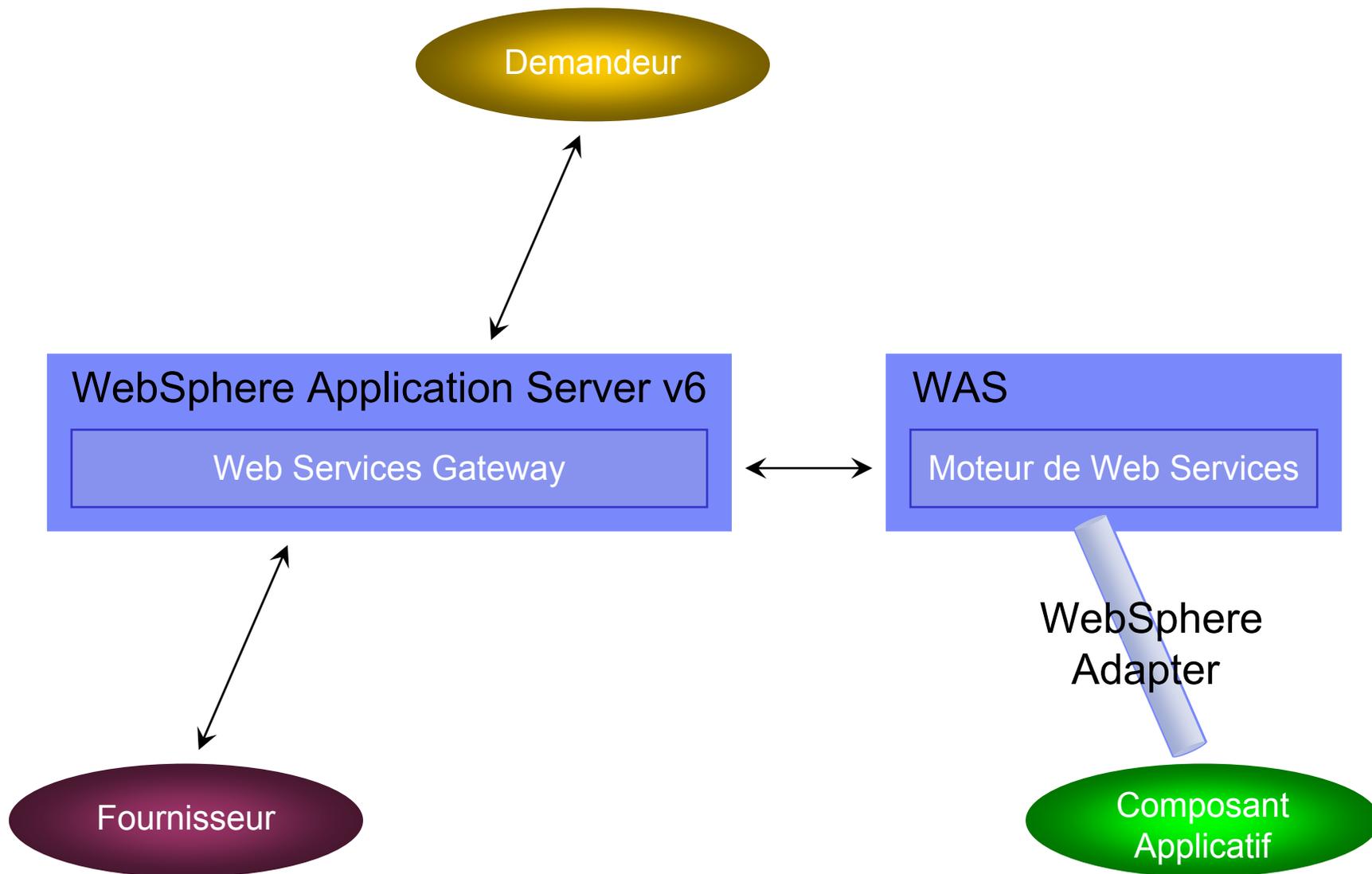
• Invocation de service

Processus client    Annonce des services    Recherche    Processus serveur



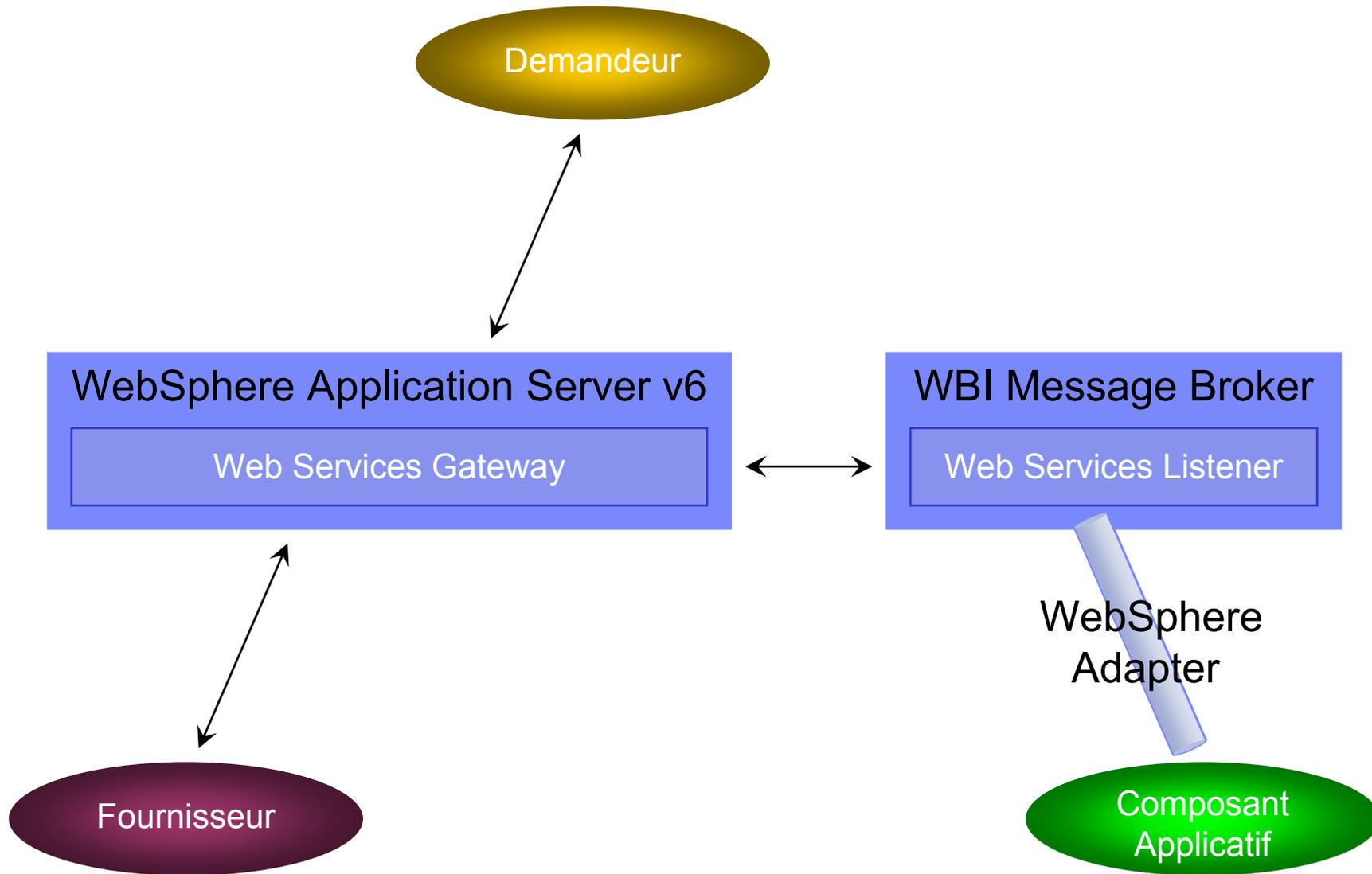
• Invocation de service

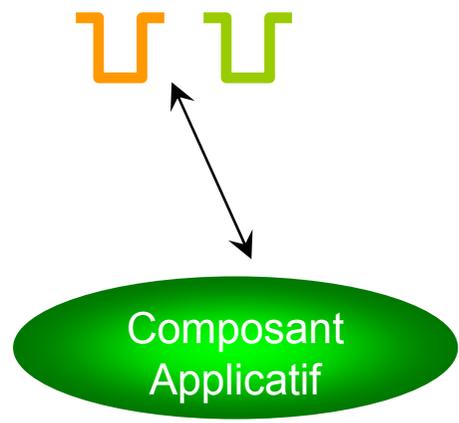
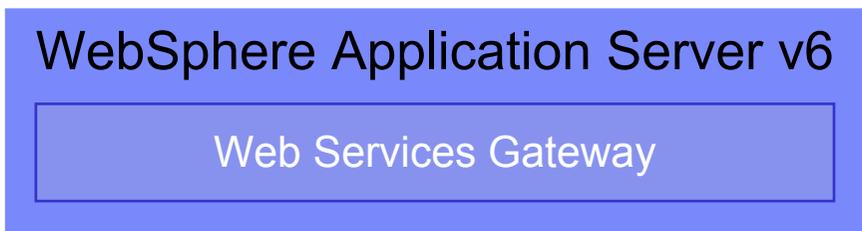
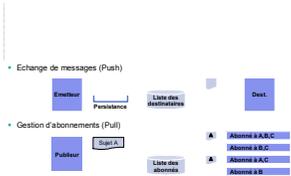
Processus client    Annonce des services    Recherche    Processus serveur

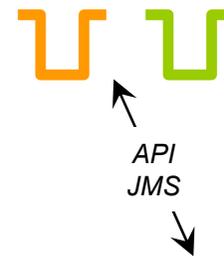
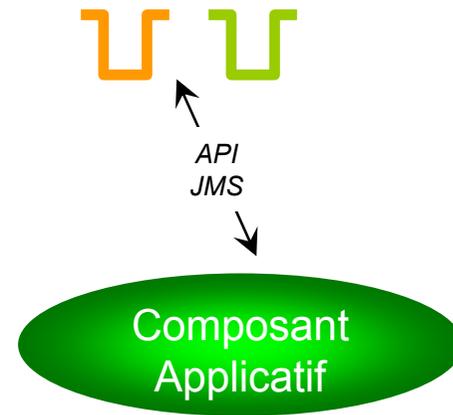
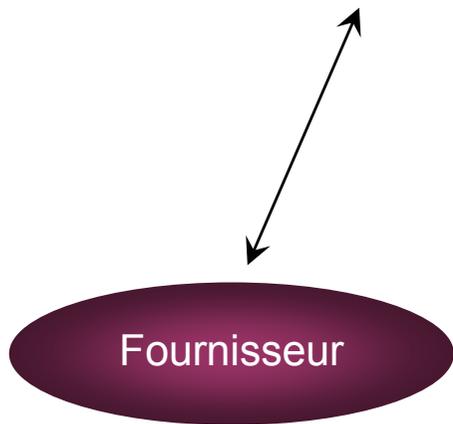
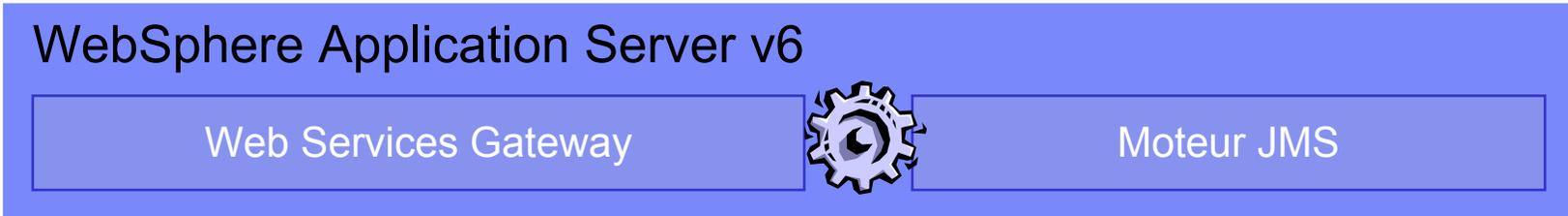
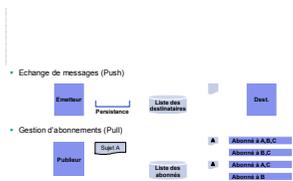


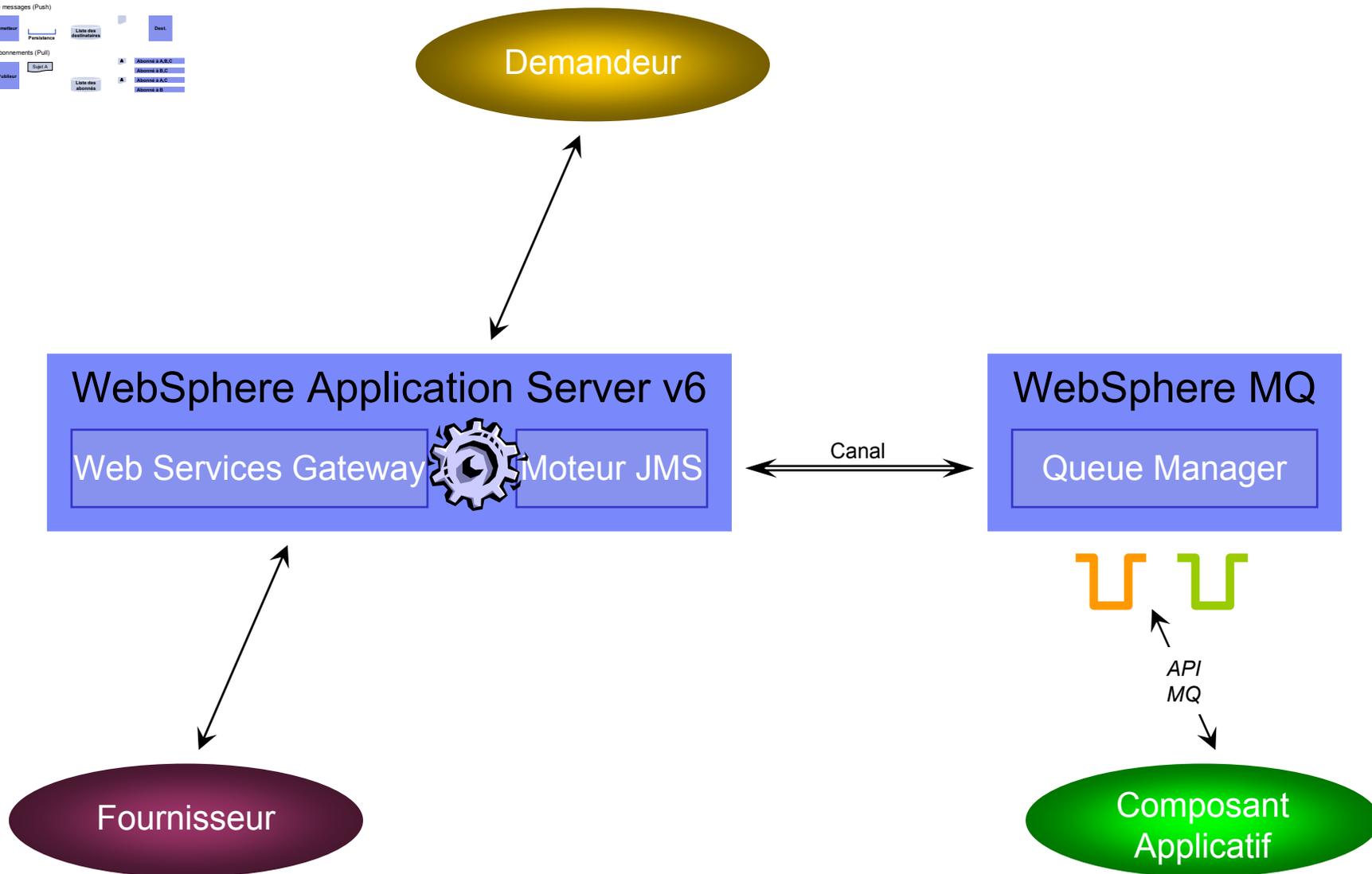
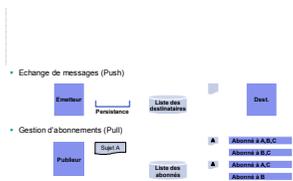
• Invocation de service

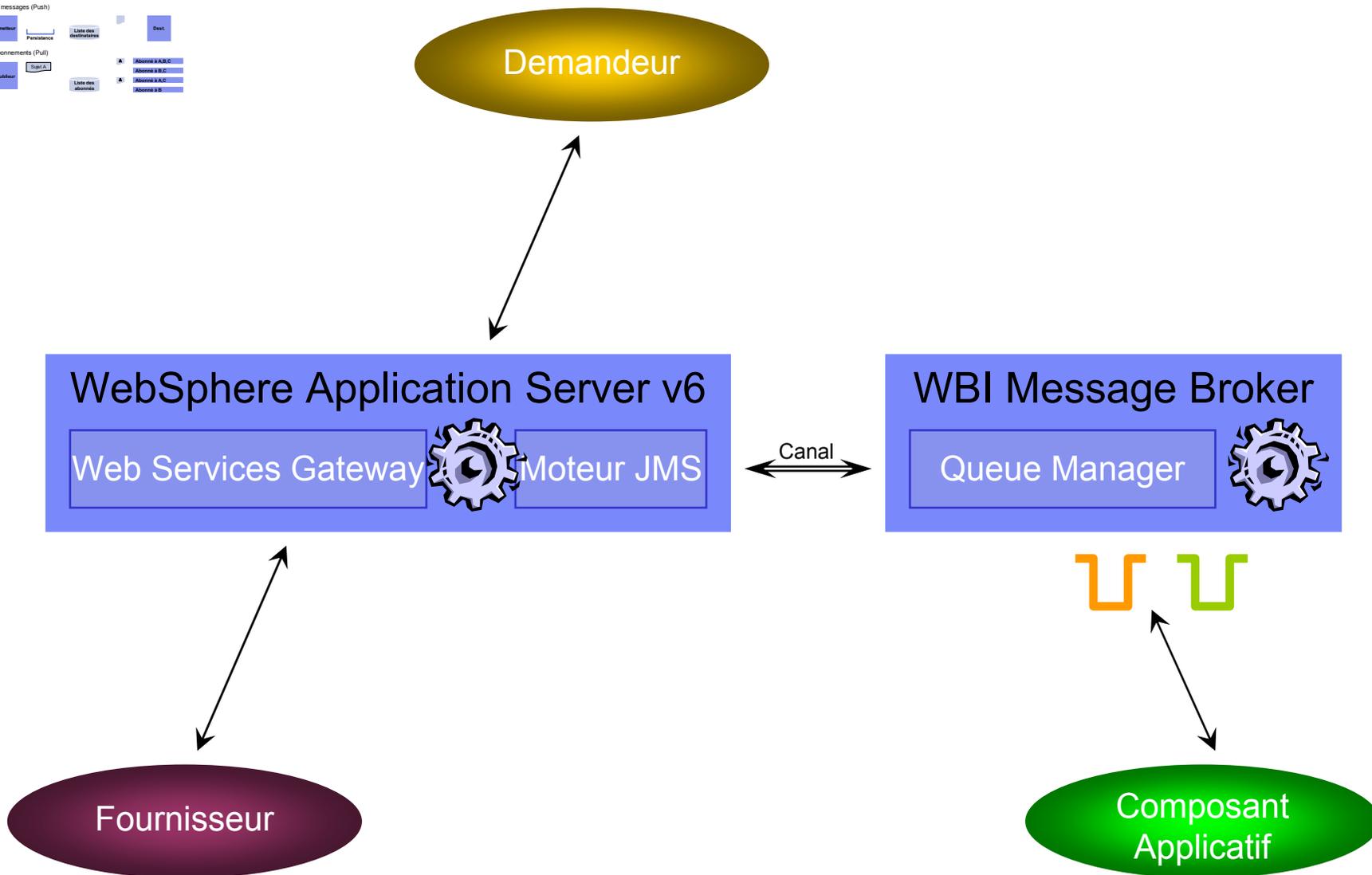
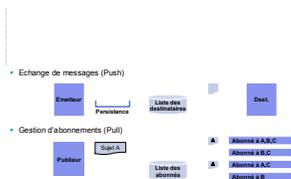
- Processus client
- Annonce des services
- Requête
- Réponse
- Processus serveur





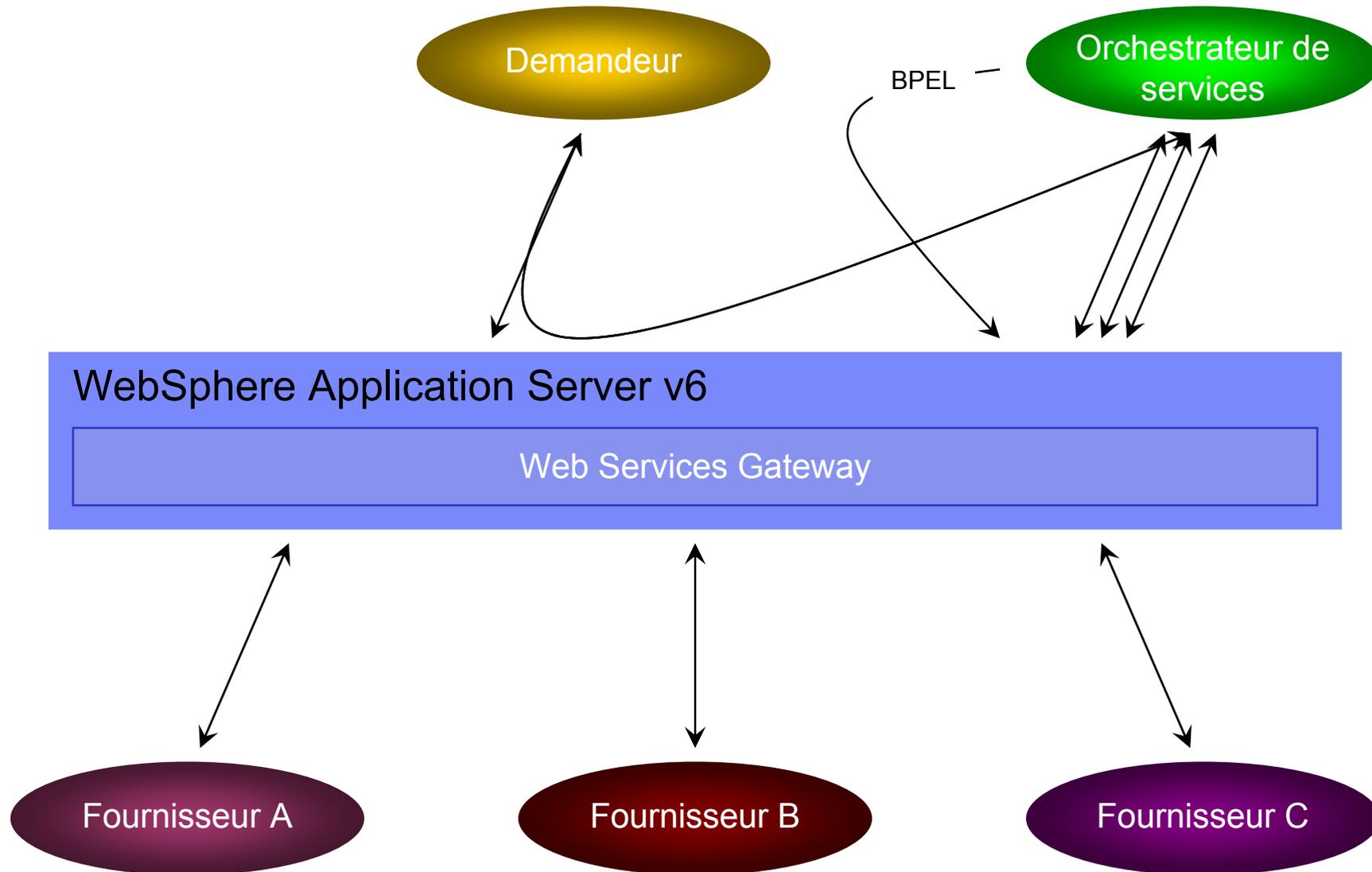






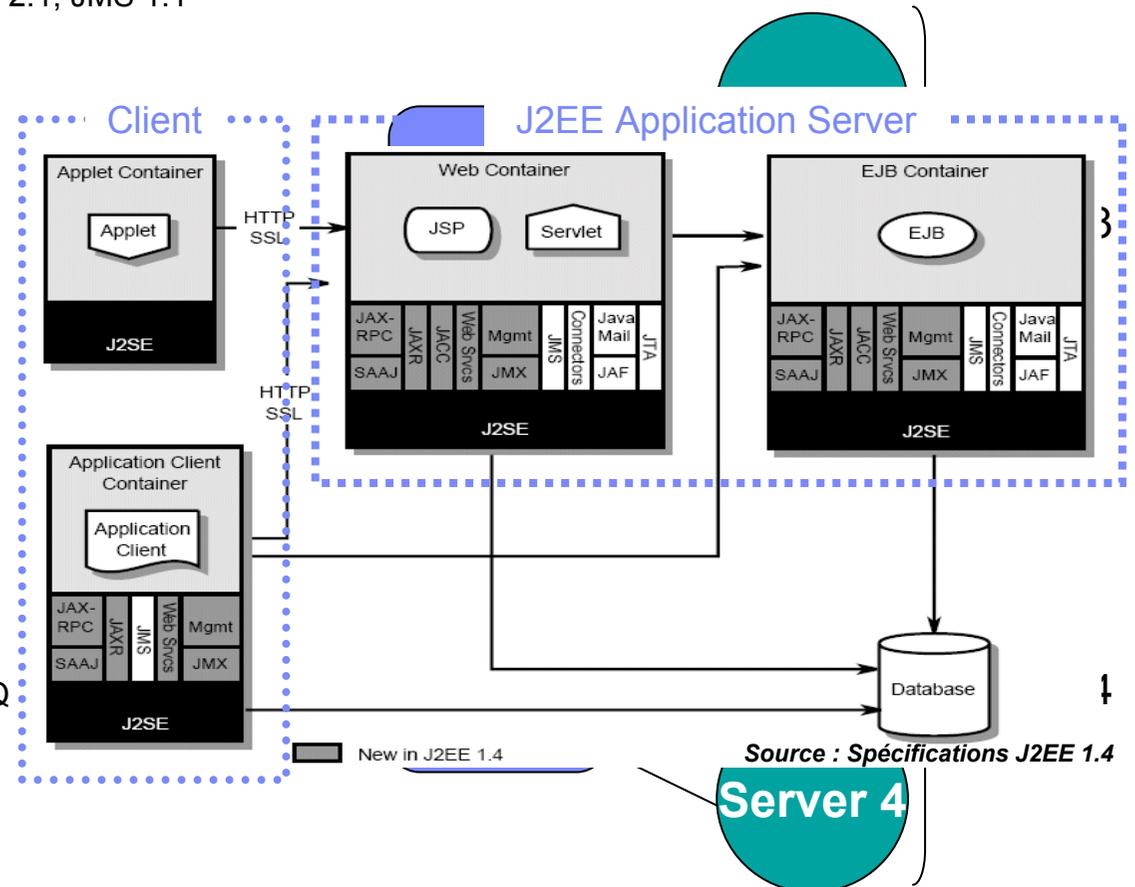
• Invocation de service

- Processus client
- Annuaire des services
- Processus serveur



# WebSphere Application Server v6

- Serveur certifié J2EE 1.4
  - ▶ JDK 1.4, JSP 2.0, Servlet 2.4, EJB 2.1, JMS 1.1
  - ▶ JDBC 3.0, J2C 1.5
  - ▶ ...
- Architecture répartie
  - ▶ Répartition de charge
  - ▶ Haute disponibilité
  - ▶ Administration centralisée
- Nouveau moteur de message
  - ▶ API JMS uniquement
  - ▶ Implémentation pur Java
  - ▶ Support point à point et pub / sub
  - ▶ Support transactionnel
  - ▶ Qualité de service paramétrable
  - ▶ Persistance éventuelle via JDBC
  - ▶ Ouvert sur les infrastructures WMQ
- Web Services
  - ▶ Annuaire UDDI v3
  - ▶ Web Services Gateway
  - ▶ WS Security 1.0, WS Interoperability, WS Transaction



# WebSphere Adapters

## For Applications

### WebSphere BI Adapters

Ariba Buyer  
 Centricity Gateway  
 Clarify CRM  
 eMatrix  
 ESRI Spatial Database  
 MS Exchange  
 i2  
 i2 Active Data Warehouse  
 IndusConnect Framework  
 JD Edwards OneWorld  
 Maximo MEA  
 Manugistics  
 Siebel  
 SunGard FRONT ARENA  
 Lotus Domino  
 MetaSolv Applications  
 mySAP  
 SAP Exchange Infrastructure  
 NightFire Applications  
 Oracle Applications  
 PeopleSoft  
 Portal Infranet  
 QAD MFG/PRO  
 Spirent Applications  
 Telcordia Applications  
 WebSphere Commerce

### Bridges

MQ Link for SAP R/3

## For Technologies

### WebSphere BI Adapters

ACORD XML  
 E-mail  
 COM  
 CORBA  
 Enterprise Java Bean  
 FIX Protocol  
 Healthcare Data Protocols  
 HTTP  
 JMS  
 JText (File/FTP)  
 SWIFT  
 TCP/IP  
 Web Services  
 WebSphere MQ  
 WebSphere BI Message Broker  
 WebSphere MQ Workflow  
 XML  
 Data Handler for Complex Data  
 Data Handler for EDI  
 Data Handler for XML

- Propagation de la qualité de service
  - ▶ Transport
  - ▶ Intégrité transactionnelle
  - ▶ Détection / déclenchement d'évènements
- Support des interfaces natives

## For Data Access

### WebSphere II Classic Federation

### WebSphere II Classic Publisher

ADABAS  
 CA-IDMS  
 CA-Datcom  
 DB2  
 IMS/DB  
 VSAM

### WebSphere Information Integrator

DB2  
 Informix  
 Sybase  
 Oracle  
 SQL Server  
 Teradata  
 ODBC

### WebSphere BI Adapters

JDBC

### CICS Business Event Publisher

DB2  
 IMS/DB  
 VSAM

## For Host Systems

### WebSphere BI Adapters

CICS  
 IMS/TM  
 Natural  
 iSeries (RPG, Dataqueues)

### Bridges

CICS MQ Bridge  
 IMS MQ Bridge

### CICS Business Event Publisher

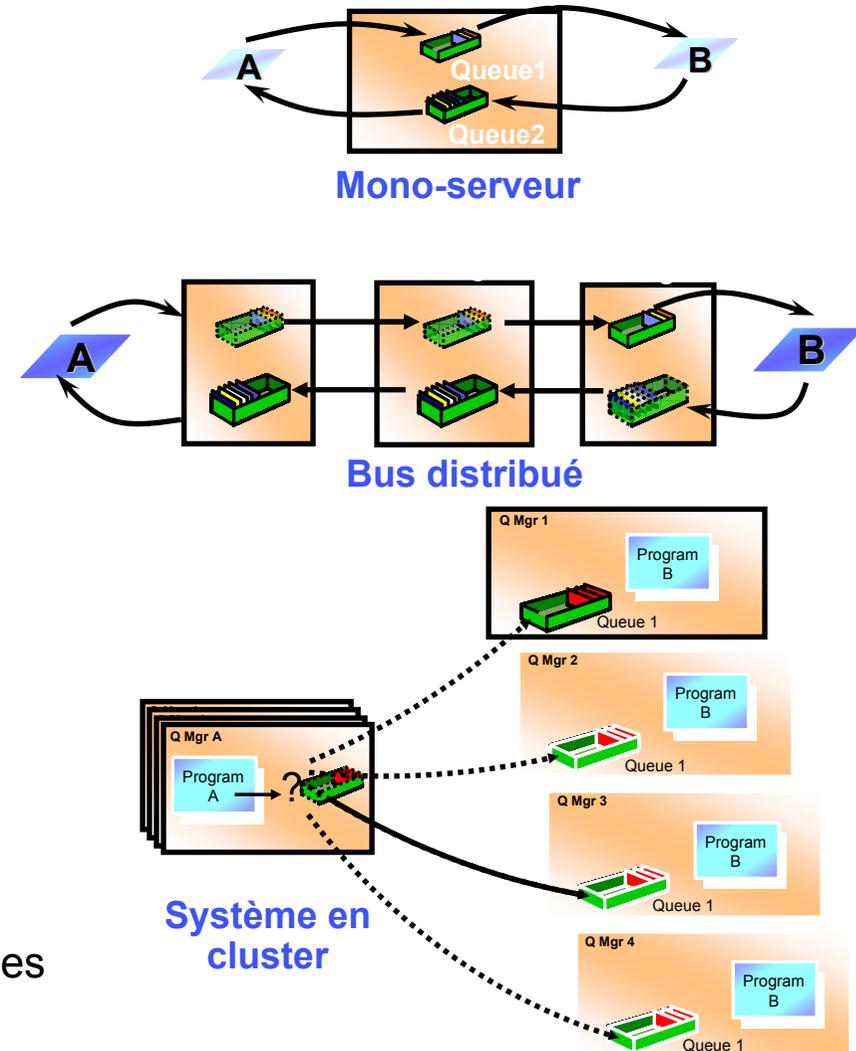
CICS

Pour la liste complète, voir <http://www.ibm.com/software/integration/wbiadapters/>

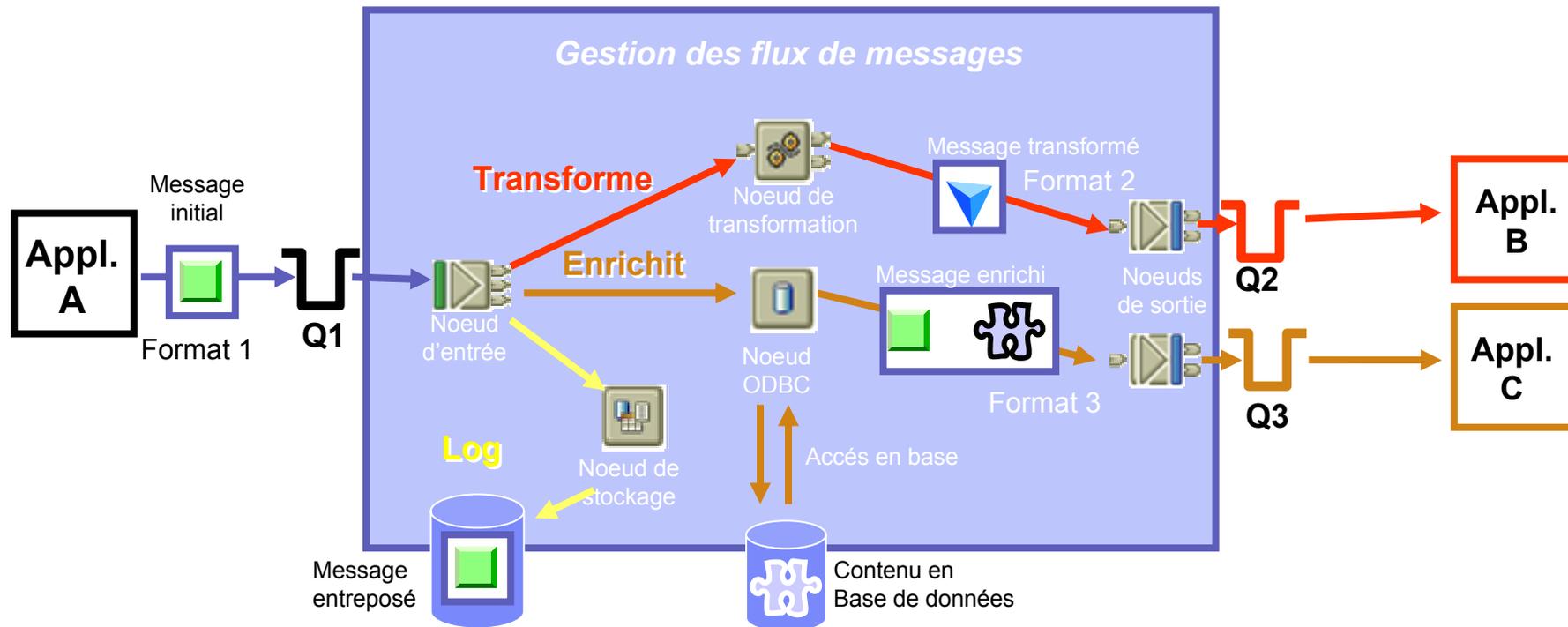


# WebSphere MQ

- Solution robuste, éprouvée et reconnue
- Architecture asynchrone
- Contrôle transactionnel
- Traitement parallèle
- Garantie de délivrance unique
- Indépendance vis à vis du contenu
- Support de messages volumineux
- Abstraction des protocoles réseau
- API disponible sur plus de 35 plateformes
- Déclenchement de traitements / programmes



# WebSphere Business Integration Message Broker



# En résumé...

