

BMC Middleware Management

Réunion GUIDE Share France WMQ

2 octobre 2012

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- ▶ **Middleware Monitoring**
 - MainView for WMQ
 - BMM Performance & Availability

- ▶ **Transaction Tracing**
 - MainView Transaction Analyzer
 - BMM Transaction Monitoring
 - BMM Transaction Analytics

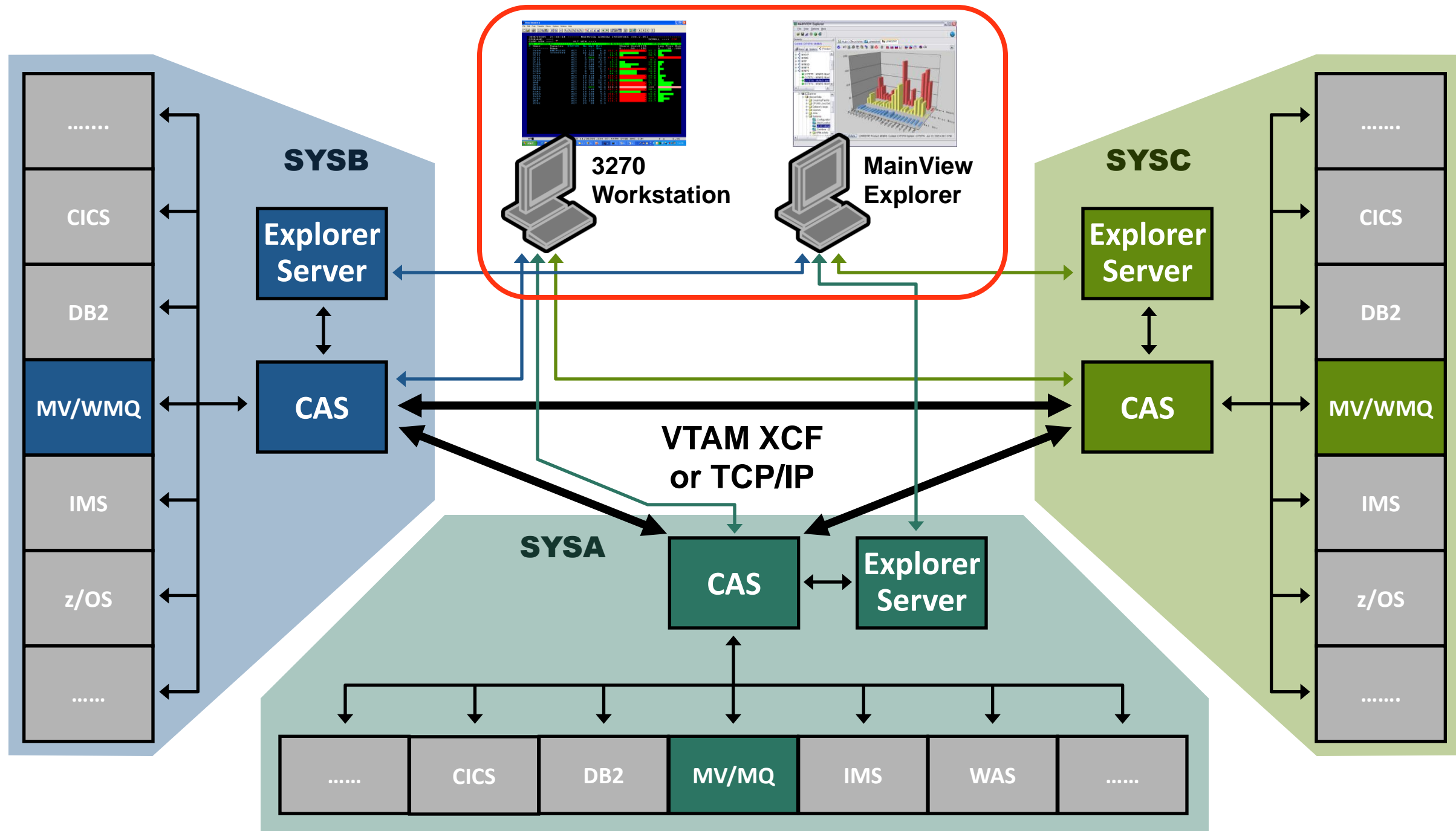
- ▶ **Middleware Administration**
 - BMM Administration for WMQ
 - BMM Administration for TIBCO EMS

MainView for WMQ

MainView for WMQ, produit basé sur z/OS, permet de :

- ▶ Vérifier l'état des Queue Managers, Queues, et Channels
- ▶ Voir et manipuler les messages
- ▶ Agir sur les objets WMQ
- ▶ Modifier les attributs des Queue Managers et de la plupart de leurs objets
- ▶ Voir les statistiques de l'API
- ▶ Analyser les Traces API
- ▶ Positionner des seuils pour avoir des alarmes
- ▶ Automatiser les Events WMQ et les messages utilisateurs
 - MV AutoOPERATOR for WMQ

Architecture MainView



```
02APR2012 07:36:10 ----- MAINVIEW WINDOW INTERFACE (V6.0.00) -----
COMMAND ==> █ SCROLL ==> PAGE
CURR WIN ==> 1 ALT WIN ==>
>w1 =QM===== (ALL=====*)02APR2012==07:36:05====MVMQS====D====2
CMD Queue SSI Platform Platform Queue Put Rate Ge
--- Manager Target Type Name Status Stats? 0....200 0.
APP1 APP1 Win NT - Active No - -
CSQ7 CSQ7 MVS SYS1 Active Yes 2 3
```

► Single System Image

```
02APR2012 07:41:26 ----- MAINVIEW WINDOW INTERFACE (V6.0.00) -----
COMMAND ==> SCROLL ==> PAGE
CURR WIN ==> 1 ALT WIN ==>
>w1 =CHANNELS===== (ALL=====APP1=====)02APR2012==07:41:24====MVMQS====D====21
CMD Channel Queue Channel Channel QSG Chl Batches Cur
--- Name Manager Type Status Disp Disp Proc'd Seq
APP1.APP2 APP1 SENDER INACTIVE PRIV N/A 0
APP1.BRKR1 APP1 SENDER INACTIVE PRIV N/A 0
APP1.CICS1 APP1 SENDER INACTIVE PRIV N/A 0
APP1.CICS2 APP1 SENDER INACTIVE PRIV N/A 0
sta APP1.CSQ7 APP1 SENDER INACTIVE PRIV N/A 0
APP2.APP1 APP1 RECEIVER INACTIVE PRIV N/A 0
CICS1.APP1 APP1 RECEIVER INACTIVE PRIV N/A 0
CICS2.APP1 APP1 RECEIVER INACTIVE PRIV N/A 0
CSQ7.APP1 APP1 RECEIVER INACTIVE PRIV N/A 0
```

► z/OS et systèmes distribués

```
02APR2012 08:01:25 ----- MAINVIEW WINDOW INTERFACE (V6.0.00) -----
COMMAND ==> █ SCROLL ==> CSR
CURR WIN ==> 1 ALT WIN ==>
>w1 =CHANNELS===== (ALL=====*)02APR2012==08:01:21====MVMQS====D====36
CMD Channel Queue Channel Channel QSG Chl Batches Cur
--- Name Manager Type Status Disp Disp Proc'd Seq
APP1.CSQ7 APP1 SENDER RETRYING PRIV N/A 0
APP1.CSQ7 CSQ7 RECEIVER STOPPED QMGR PRIVATE 0
```

- ▶ Solution z/OS pour le monitoring et l'administration de WebSphere MQ
- ▶ Intégrée avec les autres composants MainView (CICS, DB2, WAS, z/OS, etc...)
- ▶ Interface utilisateur 3270 ou Web Browser
- ▶ Single System Image
- ▶ Mainframe et Systèmes Distribués

BMM

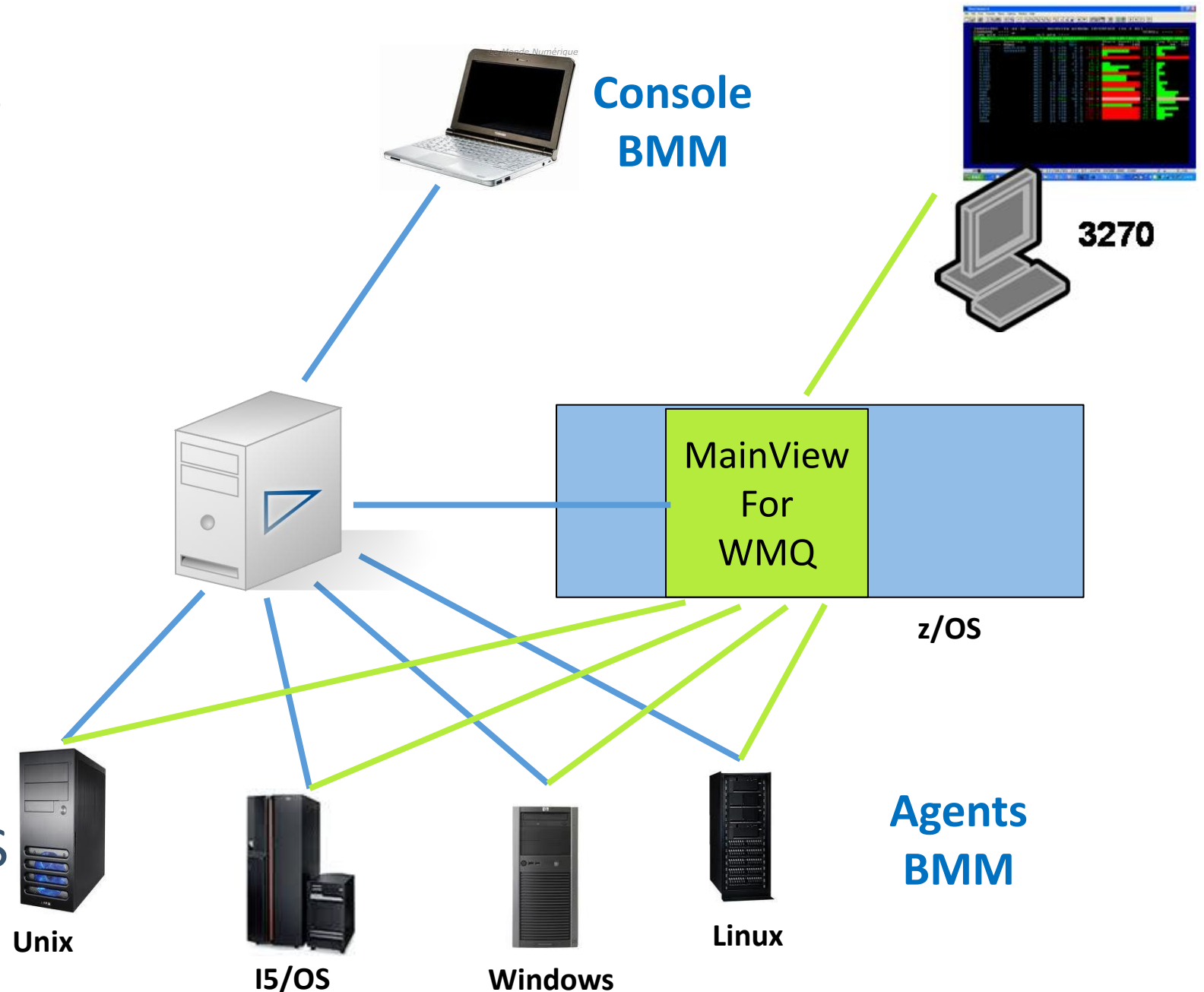
Performance & Availability

(Anciennement Q Pasa!)

Avec **BMC Middleware Monitoring**, vous pouvez :

- ▶ Avoir une Vue d'ensemble des composants du Middleware MF et D/S
- ▶ Configurer/Administrer le réseau WMQ via une Interface unique
 - Amélioration de la productivité
- ▶ Détecter les problèmes avant qu'ils n'affectent les opérations et en déterminer la cause
 - Réduction du MTTR
- ▶ Déclencher/automatiser les actions nécessaires à la résolution des problèmes
 - Augmentation de la disponibilité
- ▶ Réaliser le Reporting de l'activité du Middleware

- ▶ **Multi plateformes**
 - Facile à installer et à maintenir
 - Agent z/OS = MV/WMQ
- ▶ **Multi technologies**
 - WebSphere MQ
 - TIBCO (RDV, EMS)
 - WAS, WebLogic, GlassFish
 - IBM DataPower
- ▶ **Les agents BMM connectés à MainView for WMQ**
 - Administration WMQ sur 3270
 - Single System Image MF et D/S



- TIBCO EMS
- TIBCO RendezVous
- Oracle WebLogic
- Oracle database
- Sun GlassFish Enterprise Server
- DB2 database
- IBM HTTP Server
- WebSphere Application Server
- WebSphere InterChange Server
- WebSphere Message Broker
- WebSphere MQ Client
- WebSphere MQ Everyplace
- WebSphere MQ Server (on z/OS, via MainView)
- IBM DataPower XI50/XI50B
- API.....

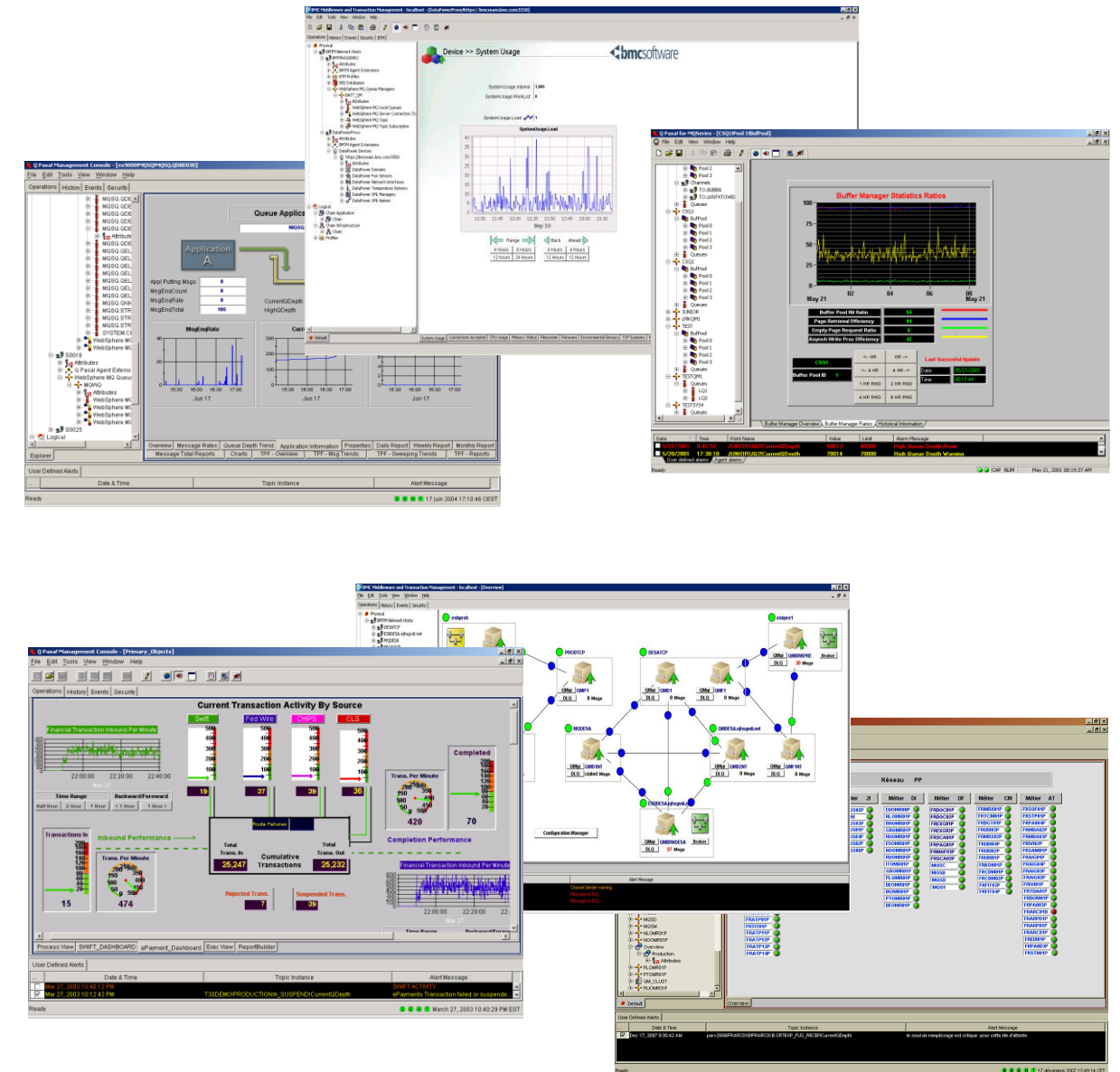
► Affichage des données de performance temps réel et des données historiques

- Surveiller le remplissage des Files
- Surveiller la charge des serveurs
- Diagnostic précis et rapide en cas d'incident

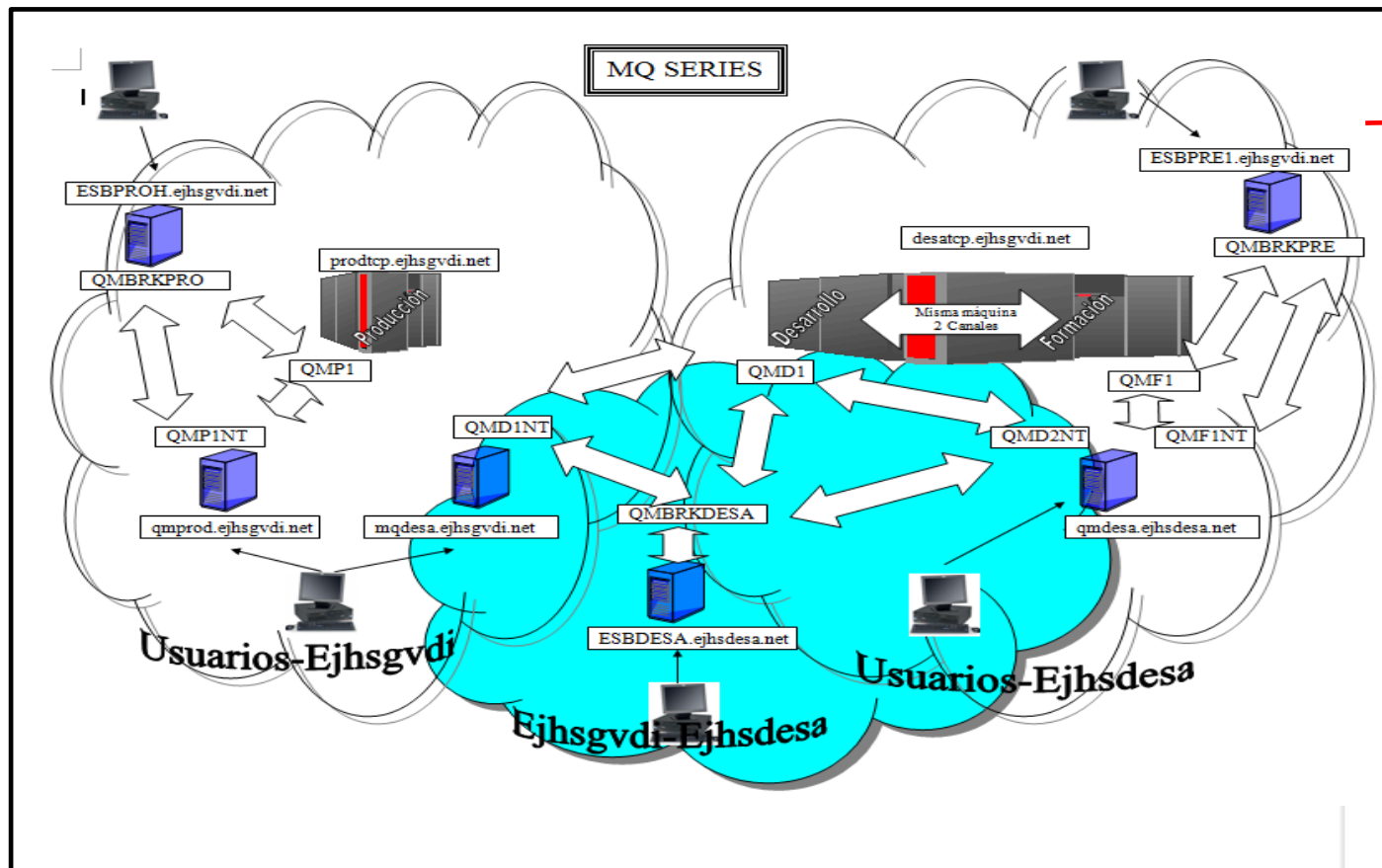
► Des Vues standards sont proposées pour tous les objets des technologies supportées (WebSphere, TIBCO, Oracle, DataPower, ...)

► Possibilité de créer des Vues Métier, ou des tableaux de bords montrant par ex :

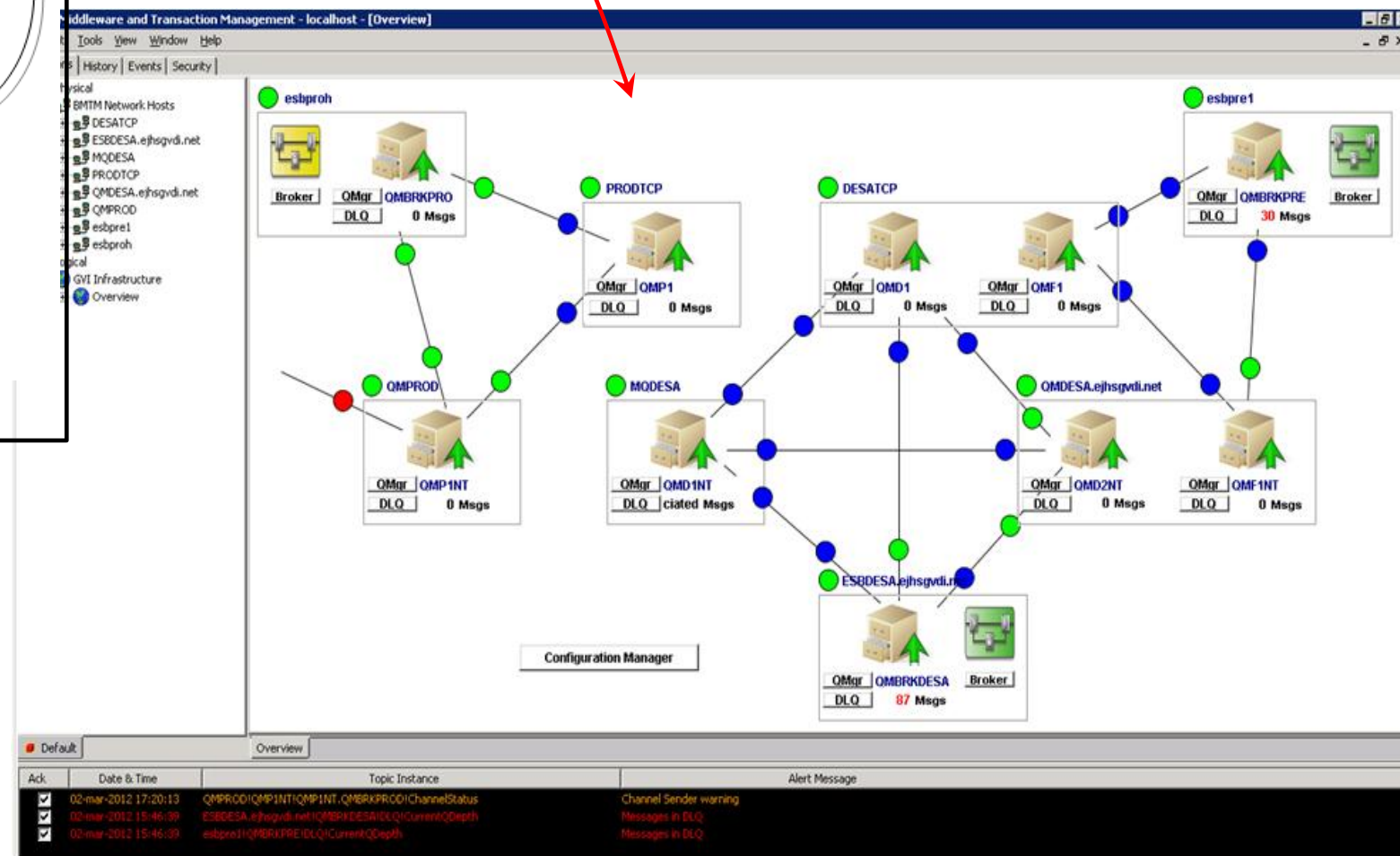
- L'état de santé d'une application
- L'impact d'un incident



BMM-PA : Exemple Vue Infrastructure



Transposition sur écran d'un schéma « papier »



BMM-PA : Exemple Vue Application

Operations
History
Events
Security

- WebSphere MQ Receiver Channels
- WebSphere MQ Sender Channels
- QMBE.WFDC.I001Q
 - Attributes
 - WebSphere MQ Local Queues
 - SYSTEM.CHANNEL.INITQ
 - SYSTEM.CLUSTER.COMMAND.Q
 - SYSTEM.CLUSTER.REPOSITORY
 - SYSTEM.CLUSTER.TRANSMIT.QL
 - WFDCBEQ.A01.GOLD.MESS.TW
 - WFDCBEQ.DEAD.LETTER.W001Q
 - Attributes
 - WFDCBEQ.EAI.GOLD.MESS.TOW
 - WFDCQ.CRP.MES.FDE.LQ
 - WFDCQ.EAI.OLD.FWM.LQ
 - WFDCQ.EPS.MES.FEP.LQ
 - WFDCQ.ERR.MES.FWD.LQ
 - WFDCQ.GLD.ERR.FWM.LQ
 - WFDCQ.GLD.MES.FWM.LQ
 - WFDCQ.PO.MES.FDES.LQ
 - WFDCQ.VOL.MES.FWM.LQ
- WebSphere MQ Receiver Channels
- WebSphere MQ Sender Channels
- SY1X
- SY2X
- Logical
 - Agents_QUAL
 - Overview
 - Appli_UBIDATA
 - Test Environment

Application UBIDATA

Infrastructure

between DESPOST and UBIDATA for test

msgs 37.151 nb conn 9

veen Bouge Remor and UBIDATA for test

msgs 72.558 nb conn 0

from" between AXIO and UBIDATA for test

msgs 11.826 nb conn 11

EU03444-MQS

QMBE.UBDA.W001Q

QMGr ● DLQ ● CHIN ●

DESP.MESS.TOUBI.LQ

Zoom ●

OpenIn 9 Out 0

Msg in 0 0

DESP.MESS.FROMUBI.TQ

Zoom ●

OpenIn 1 Out 100

Msg in 2428 0

.AXIO.MESS.TOUBI.LQ

Zoom ●

OpenIn 11 Out 2

Msg in 0 0

..BGR.MESS.TOUBI.LQ

Zoom ●

OpenIn 0 Out 0

Msg in 178 0

EUI5106-ZEP

QMBE.UBDA.I001Q

QMGr ● DLQ ● CHIN ●

JAQ.DES.MES.FUD.LQ

Zoom ●

OpenIn 0 Out 1

Msg in 22 ***

JAQ.BGR.MES.FUD.LQ

Zoom ●

OpenIn 1 Out 0

Msg in 0 0

User Defined Alerts

Ack	Date & Time	Topic Instance	Alert Message
✓	Oct 21, 2011 2:09:29 PM	EUI5106-ZEP QMBE.WFDC.I001Q WFDCBEQ.DEAD.LETTER.W001Q.DQ CurrentQDepth	Messages in DLQ
✓	Oct 21, 2011 2:09:28 PM	EUI5106-ZEP QMBE.UBDA.I001Q UBDA.Q.DES.MES.FUD.LQ CurrentQDepth	More than 100 messages in Queue

Ready
A E H T 21 October 2011 15:01:08 CEST

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BMM-PA : Zoom sur une Queue

Operations History Events Security

- WFDCQ.EAI.OLD.FWM.LQ
- WFDCQ.EPS.MES.FEP.LQ
- WFDCQ.ERR.MES.FWD.LQ
- WFDCQ.GLD.ERR.FWM.LQ
- WFDCQ.GLD.MES.FWM.LQ
- WFDCQ.PO.MES.FDES.LQ
- WFDCQ.VOL.MES.FWM.LQ
- WebSphere MQ Receiver Channels
- WebSphere MQ Sender Channels
- SY1X
 - Attributes
 - Q Pasal Agent Extensions
 - WebSphere MQ Queue Managers
 - QM1Q
 - Attributes
 - WebSphere MQ Local Queues
 - WebSphere MQ Receiver Channels
 - WebSphere MQ Sender Channels
 - WebSphere MQ Server Connection C
 - WebSphere MQ zOS Buffer Pools
 - WebSphere MQ zOS Data Manager
 - WebSphere MQ zOS Log Manager
 - WebSphere MQ zOS Msg Mgr API
 - WebSphere MQ zOS Page Sets
 - Pset 00
 - Attributes
 - Pset 01
 - Pset 02
 - Pset 03
 - Pset 04
 - Pset 05
 - Pset 06
 - WebSphere MQ zOS Storage Manage
 - QM1T
- SY2X
- Logical

Queue >> Overview

QName: **UBDAQ.DES.MES.FUD.LQ**

MsgEnqRate

CurrentQDepth

MsgDeqRate

MsgEnqCount	0
MsgEnqRate	0
MsgEnqTotal	23

OldestMsgAge	Not Available	sec.
CurrentQDepth	4,891	
HighQDepth	4,891	

MsgDeqCount	0
MsgDeqRate	0
MsgDeqTotal	0

Appl Putting Msgs	1
LastPutDate	
LastPutTime	

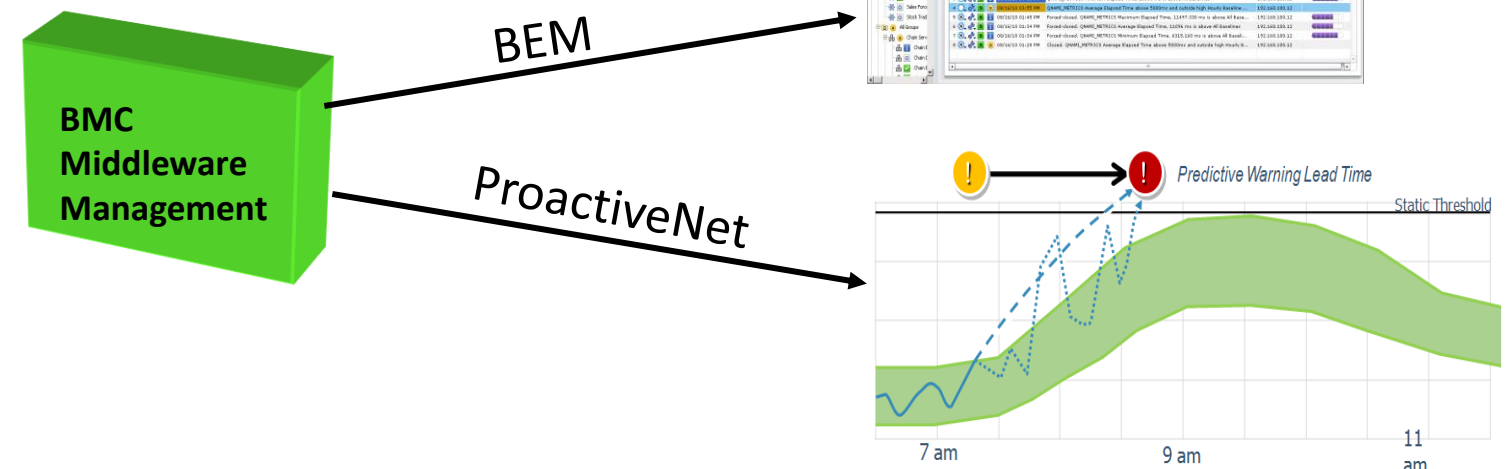
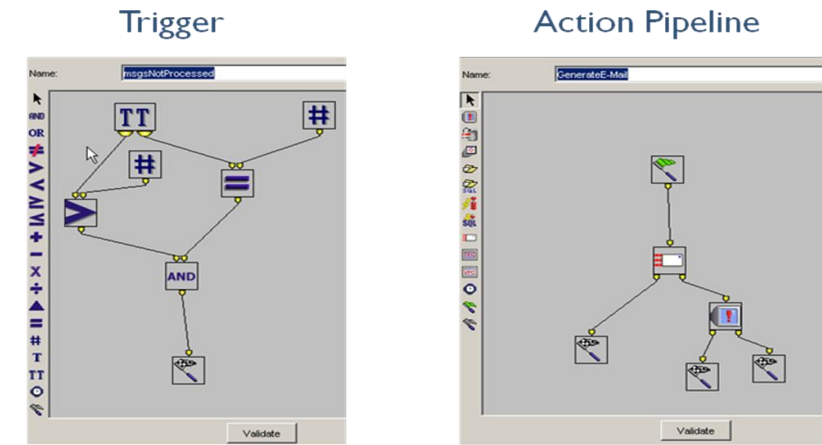
Appl Getting Msgs	0
LastGetDate	
LastGetTime	

Alerts

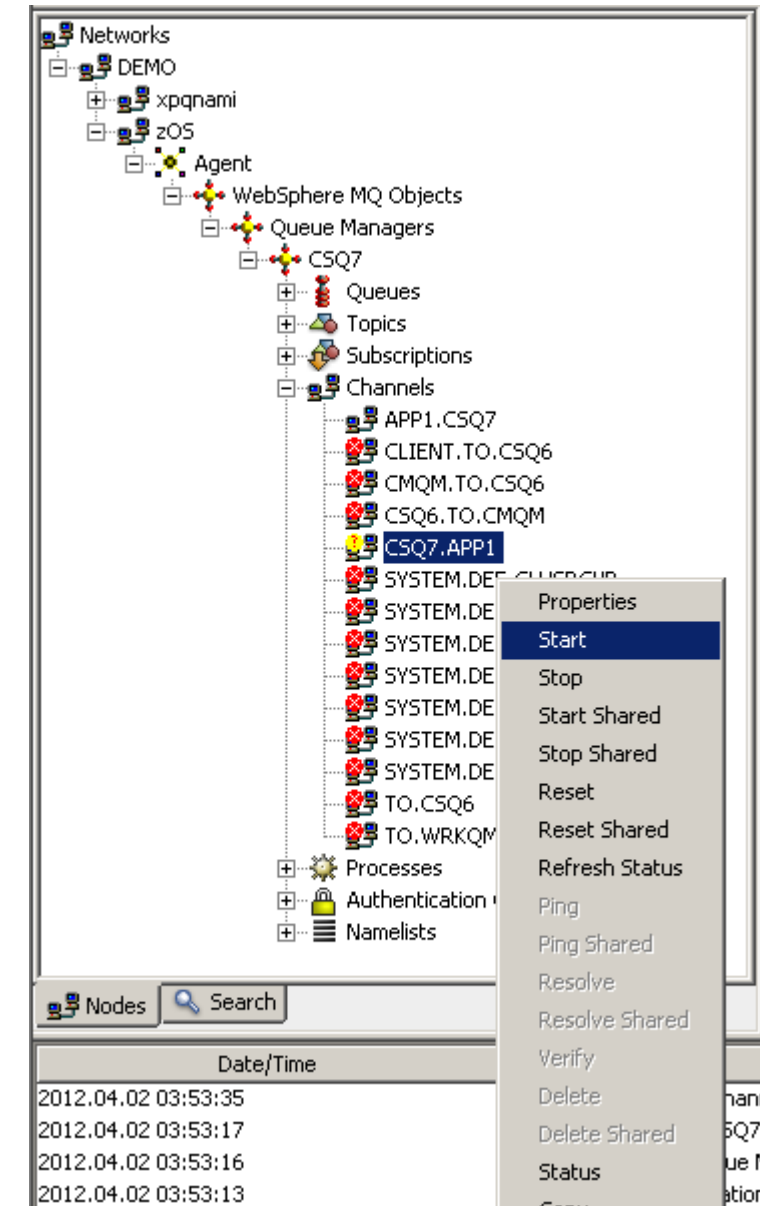
Info 0	Warning 0	Critical 1
-----------	--------------	---------------

Overview | Queue Depth | Message Rates | Attached Processes | Properties | Daily Report | Weekly Report | Monthly Report | Message Total Reports | Charts

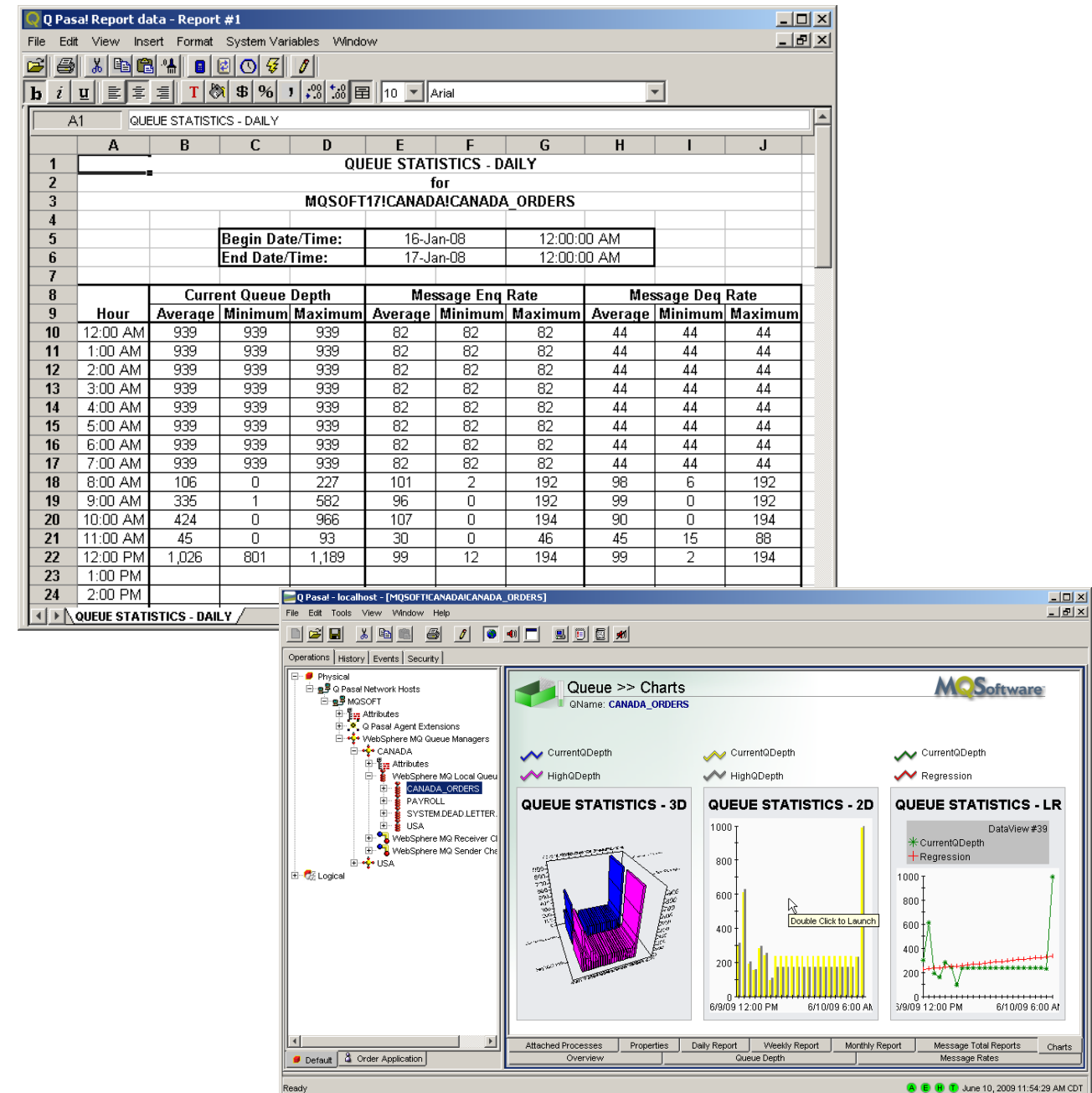
- ▶ Point central pour le paramétrage des seuils et conditions anormales
 - Interface intuitive
 - Déploiement automatique
- ▶ Alertes et actions automatiques
- ▶ Intégration BEM
 - Gestion des alertes
- ▶ Intégration ProactiveNet
 - Seuils dynamiques



- ▶ Administration des objets WMQ
 - Interface unique MF et D/S
- ▶ Manipulation des messages
 - Visualisation/Edition
 - Comprendre le routage vers les DLQs
 - Réaiguillage/Copie/Sauvegarde
- ▶ Journal des actions et modifications
- ▶ Modèles d'applications « variabilisés »
 - Y compris les définitions de sécurités D/S
 - Déploiement multi plateformes synchronisé



- ▶ Reports de l'activité
 - Nombreux modèles pour toutes les technologies supportées
- ▶ Outils d'analyse fournis
- ▶ Détections des tendances et heures de pointe
 - Gestion des performances
 - Capacity Planning
- ▶ Stockage en ligne long terme
 - Jusqu'à plusieurs années
 - Rétention gérée automatiquement



- ▶ Une solution complète pour le monitoring, l'automatisation, la configuration et le reporting du Middleware
- ▶ Facilité d'installation et de mise en œuvre
- ▶ Intégration MainView
 - Collecte des données WMQ z/OS
 - Interface utilisateur 3270 pour accéder aux Queue Managers D/S
- ▶ Intégration BEM et ProactiveNet
- ▶ Interface commune pour toutes les plateformes
 - Amélioration de la productivité
 - Amélioration de la disponibilité
- ▶ De nombreuses références

BMM

Transaction Analytics

(Anciennement StatWatch)

- Collecte et archivage de messages WMQ

 - Collecte via les exits Channel et API

 - Stockage dans une base de données

- Identifier, retrouver, un message :

 - Recherches multicritères via un browser web

 - Est-il en cours de traitement ? A-t-il été traité ? En Combien de temps ?

 - Par où est-il passé ?

- Reporting :

 - Volumes de messages par destinations, par tailles

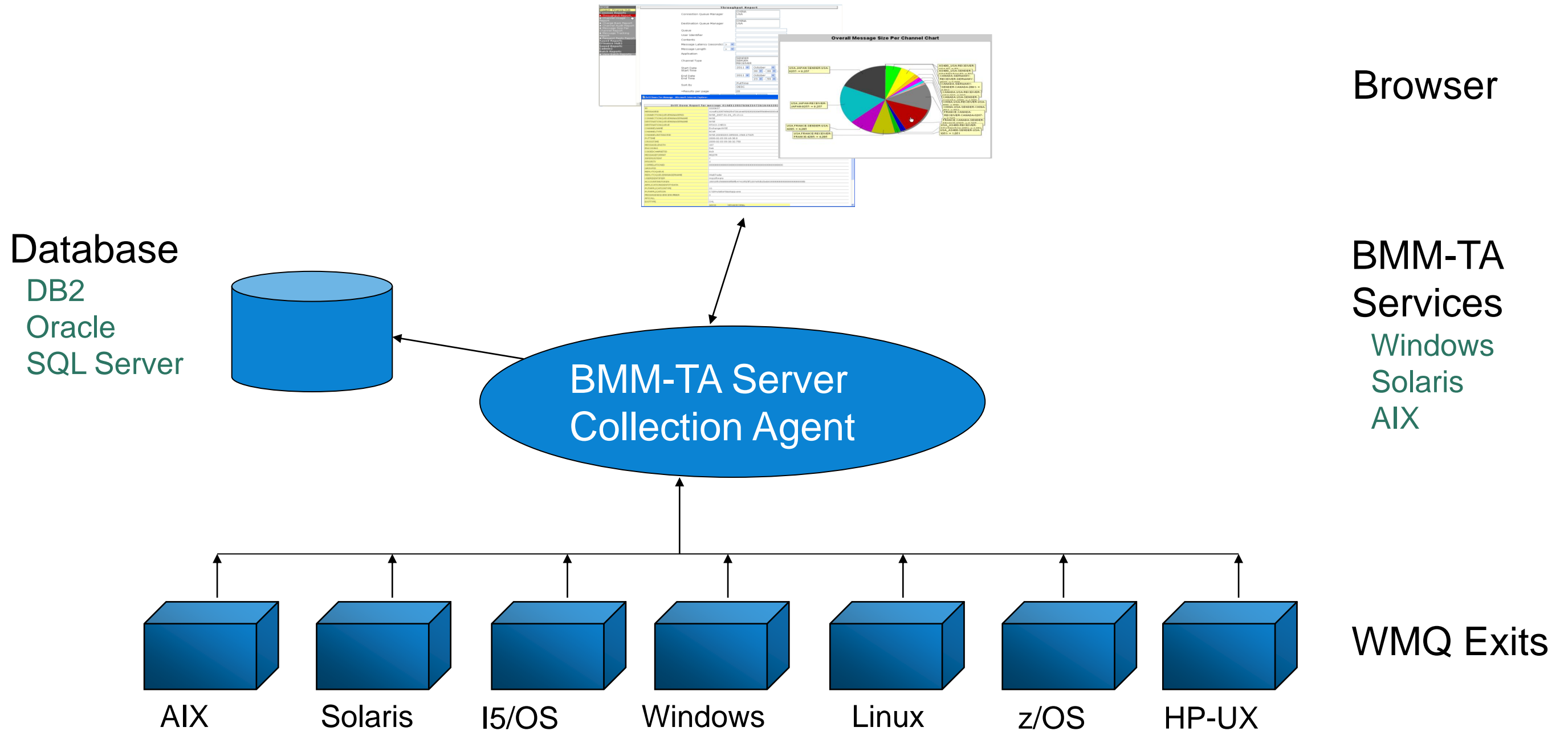
 - Détail de l'utilisation pour répartition des coûts

 - Vérification du SLA

- Requeuing :

 - Rejouer une transaction

 - Créer un jeu de test



- Accès par projets

Les projets sont définis par l'administrateur du produit,
et affectés à des utilisateurs

Administration via browser web

- Le projet définit les limites

Quels QMgrs l'utilisateur est-il autorisé à voir

Reports spécifiques définis par l'administrateur du projet

Rôle de l'utilisateur : « Administrator », « User » ou « Viewer »

- Simple à administrer et à utiliser
- Capture et archivage des messages WMQ
- Recherche de messages

Quelles sont les applications qui ont envoyé ces messages ?

Où ces messages ont-ils été envoyés ?

Où sont les goulets d'étranglement ?

- Reporting

Facturation par application

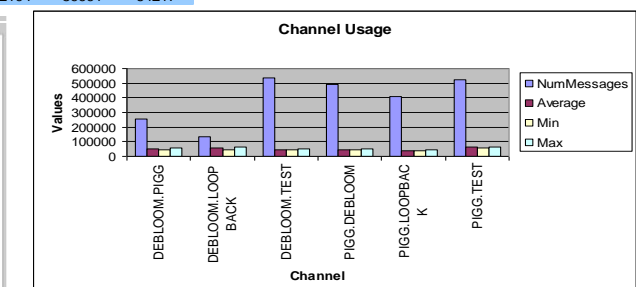
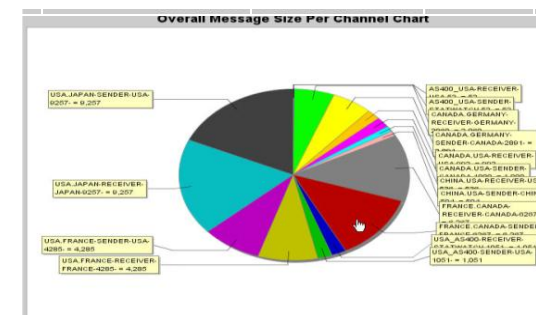
Vérification du SLA

Utilisation des canaux

- Requeuing

Channel Usage Report

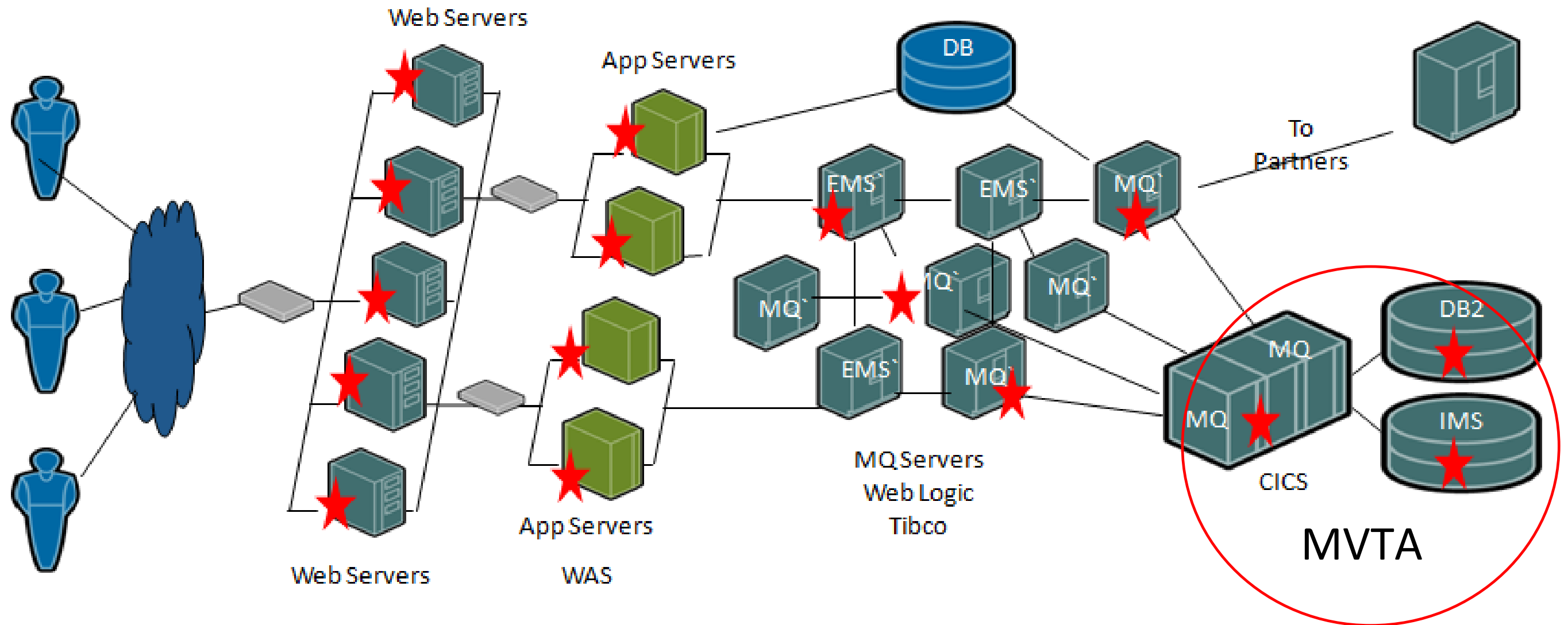
ChannelType	ConnectionQueueManager	Channel	Week of 2/6/03 NumMessages	Daily Average	Daily Min	Daily Max
SENDER	DEBLOOM	DEBLOOM.PIGG	255000	50488	45100	55876
SENDER	DEBLOOM	DEBLOOM.LOOPBACK	136987	55783	45634	65932
SENDER	DEBLOOM	DEBLOOM.TEST	534000	47783	45689	49876
SENDER	PIGG	PIGG.DEBLOOM	492880	47401	46280	48522
SENDER	PIGG	PIGG.LOOPBACK	409750	39076	35561	42591
SENDER	PIGG	PIGG.TEST	520975	62104	59991	64217



BMM Transaction Tracing

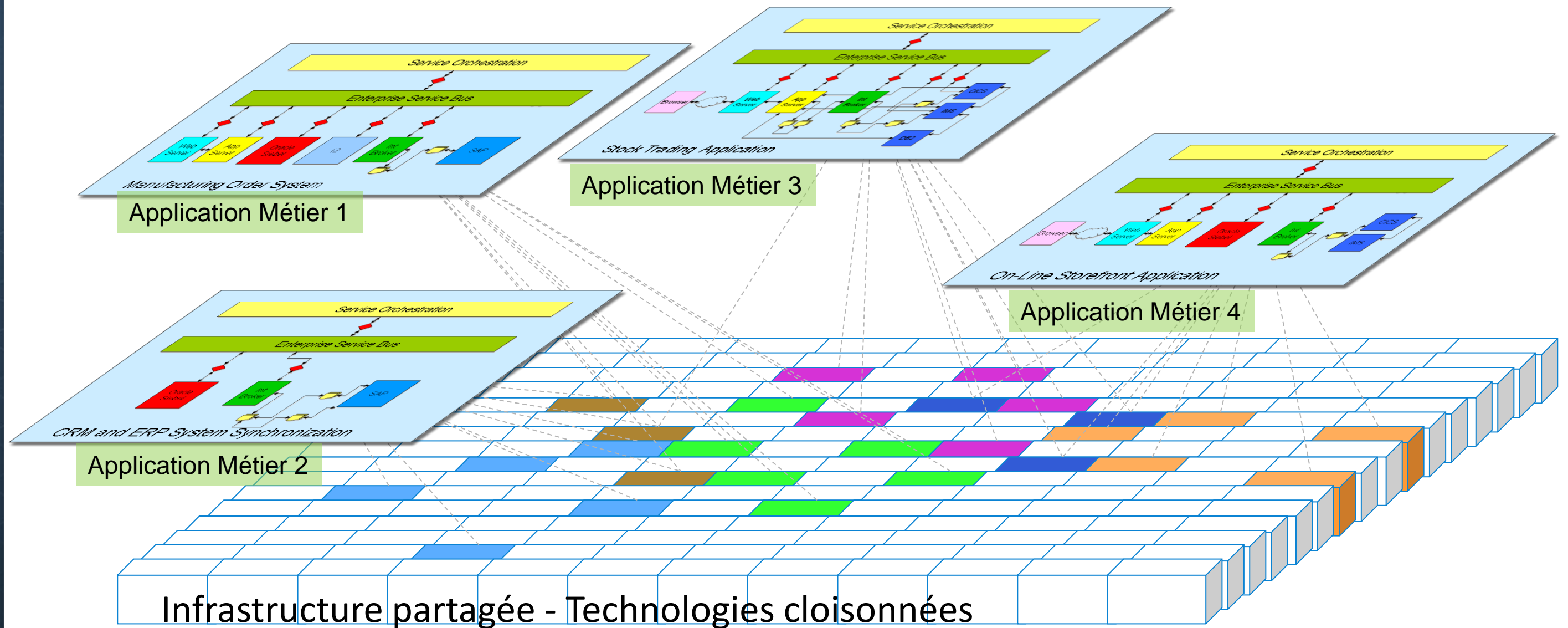
(Anciennement Q Nami!)

- ▶ **Suivi des Transactions de bout en bout**
 - Nombreuses technologies supportées
 - API
- ▶ **Monitoring SLA**
- ▶ **Alertes et automatisation**
 - Quantification des transactions
 - Timeout
 - Echec
 - Données métier
 - Performance & disponibilité
- ▶ **Tableaux de bords**
 - Vues d'infrastructures
 - Vues métiers
- ▶ **Intégration MainView Transaction Analyzer**
- ▶ **Collecte de l'historique et Reporting**
 - Stockage et présentation des données métier et techniques



★ : Point de capture

Les applications fournissent des services métier à l'entreprise



- ▶ Java EE Servlet Monitoring
 - JBoss Application Server
 - Tomcat Application Server
 - WebSphere Application Server
 - Sun GlassFish Enterprise Server
- ▶ Java EE API:
 - JBoss Application Server
 - Tomcat Application Server
 - WebSphere Application Server
 - Sun GlassFish Enterprise Server
 - BEA WebLogic
- ▶ AquaLogic Service Bus
- ▶ CEI Monitoring
- ▶ WebSphere Enterprise Service Bus
- ▶ WebSphere Process Server
- ▶ HTTP Monitoring:
 - ▶ Apache
 - ▶ IBM HTTP Server
 - ▶ IIS
 - ▶ Sun Java System Web Server
- ▶ TIBCO BusinessWorks
- ▶ TIBCO EMS
- ▶ WebSphere Message Broker
- ▶ WebSphere MQ
- ▶ BMC MainView Transaction Analyzer
- ▶ BTM API:
 - C, COM, Java, Java JMX, CICS
- ▶ CICS Transaction Gateway

BMTM-TM : Dashboard Application



BMC Middleware and Transaction Management - localhost - [Chain]

File Edit Tools View Window Help

Operations | History | Events | Security | BTM

- Chain_DataPower_3
- Chain_Store_1
 - Attributes
 - BTM Activities
 - InDPend
 - InDPstart
 - Attributes
 - BTM Transaction Pa
 - Customer Name
 - Item Number (I
 - Item Price (InD
 - Store (InDPstar
 - Attributes
 - BTM Transe
 - Antioch
 - Bayview
 - Atti
 - Fremon
 - Palo Alt
 - San Jos
 - Sunset
 - Vallejo
 - Van Ne
 - West O
 - OrderReply
 - OrderRequest
 - OutDPend
 - OutDPstart
 - SendReply
 - SendToBackOffice
 - BTM Metrics
- DB2 Databases
- WebSphere MQ Queue Managers
 - BATT_QM
 - Attributes
 - WebSphere MQ Local Queues
 - WebSphere MQ Server Connection
 - WebSphere MQ Topic
 - WebSphere MQ Topic Subscription
- DataPowerProxy
- Logical
 - Chain Application
 - Chain Infrastructure
 - Chain
 - Profiles

Current Orders (5 min. Snapshot)

Sep 10

Range: 4 Hours, 8 Hours, 12 Hours, 24 Hours

Back: 4 Hours, 12 Hours

Ahead: 4 Hours, 12 Hours

Daily Orders (5 Min. Snapshot)

Total	107
Under	100
Over	7
Failed	0

Response Times (5 Min. Snapshot)

Maximum	2,997
Average	1,834
Minimum	1,311

Response Times (5 Min. Snapshot)

Sep 10

Range: 4 Hours, 8 Hours, 12 Hours, 24 Hours

Back: 4 Hours, 12 Hours

Ahead: 4 Hours, 12 Hours

Daily Orders (by store)

Sep 10

Range: 4 Hours, 8 Hours, 12 Hours, 24 Hours

Back: 4 Hours, 12 Hours

Ahead: 4 Hours, 12 Hours

Daily Orders By Store

Antioch	2,548
Bayview	2,542
Fremont	2,505
Palo Alto	2,612
San Jose	2,620
Sunset	2,547
Vallejo	2,529
Van Ness	2,579
West Oakland	2,540

Daily Response Times

Maximum	7,311
Average	1,829
Minimum	1,264

Response Times (Daily)

Sep 10

Range: 4 Hours, 8 Hours, 12 Hours, 24 Hours

Back: 4 Hours, 12 Hours

Ahead: 4 Hours, 12 Hours

A E H T 1:11:17 PM

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BMTM-TM : Voir le chemin suivi par les Transactions

Q Nami! Management Console - [InsuranceModel!DemoModel Generated 05/09/2007 08:19:44]

File Edit Tools View Window Help

Operations History Events Security BTM

- R3 Traffic SLAs
 - Customers
 - Agents
 - Key Infrastructure
 - R3 End to End
 - Attributes
 - PolicyWriter AppSvrs
 - Find a Transaction
 - R3
 - R3 Application Performance
 - Overview

Begin → APP_PUT1 → A1_XMITQ → BRKR1_REQ → B1_XMITQ → CICS1_REQ → C1_XMITQ → CICS_RESP → B1_XMITQ1 → APP1_RESP → APP_GET1 → End

FAILURE1 → End1

FAILURE2 → End2

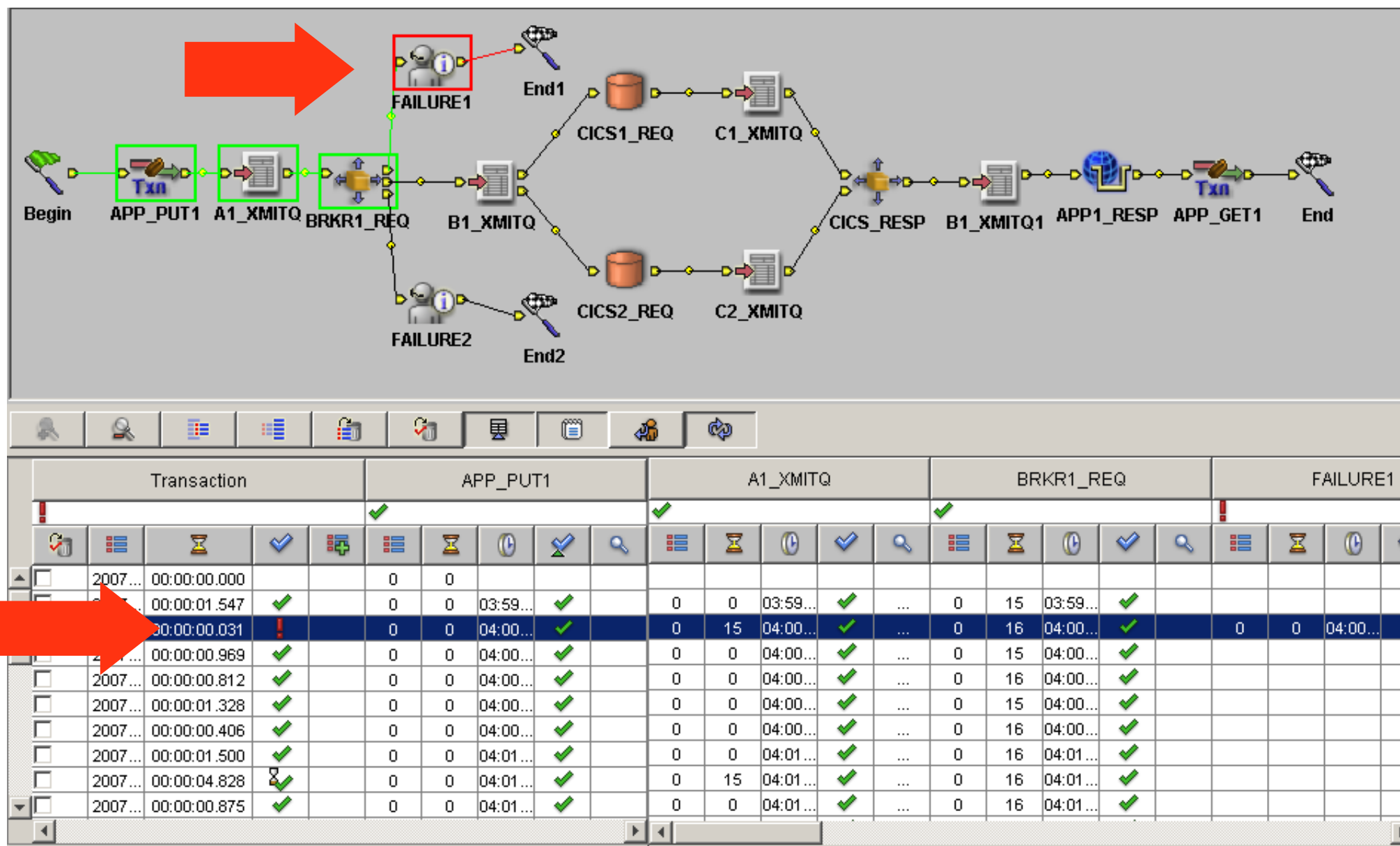
Business Service View Business View

Transaction	APP_PUT1	A1_XMITQ	BRKR1_REQ	FAILURE1
2008... 437	0 0 02:35...	0 0 02:35...	0 16 02:35...	
2008... 1031	0 0 02:34...	0 0 02:34...	0 0 02:34...	
2008... 1031	0 0 02:31...	0 0 02:31...	0 0 02:31...	
2008... 812	0 0 02:30...	0 0 02:30...	0 0 02:30...	
2008... 453	0 0 02:30...	0 0 02:30...	0 16 02:30...	
2008... 1172	0 0 02:30...	0 0 02:30...	0 0 02:30...	
2008... 281	0 0 02:34...	0 0 02:34...	0 0 02:34...	
2008... 16	0 0 02:31...	0 0 02:31...	0 16 02:31...	0 0 02:31...
2008... 0	0 0 02:28...	0 0 02:28...	0 0 02:28...	0 0 02:28...
2008... 15	0 0 02:27...	0 15 02:27...	0 0 02:27...	0 0 02:27...

BTM View BTM History View Daily Report Monthly Report Yearly Report New Tab

Ready October 7, 2008 2:53:56 PM CDT

BMTM-TM : Voir l'origine d'un problème



BMTM-TM : Voir les données métier d'une Transaction

The screenshot displays the BMC software interface for viewing transaction data. At the top, a flow diagram shows the sequence of activities: Begin, Write_BW_Request, Read_BW_Request, Send, SendToBackEnd, ReadBackEndResponse, Send_BW_Response, Read_BW_Response, and End. A central window titled "Transaction Payload Data" provides details for a specific transaction:

Txn Id: COA89286:0135872BE95B:8EF8:002BB514
 Activity: Send_RV

Name	Label	Value
Store	Store	334455
Price	Price	NORTON
Address	Address	1787 NEBRASKA ROAD Nort...
FirstName	FirstName	NV 8538
ProductName	ProductName	834.33636
LastName	LastName	RHODA
ProductId	ProductId	JVC MiniDV Digital Camcorder

Below the payload data is a table with columns for transaction ID, status, and various performance metrics. The bottom row is highlighted in blue:

Transaction ID	Status	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value
COA89286:0135872AAE33:4BE8:00872380	8376	0	0	06:1...	0	0	06:1...	0	0	06:1...	0	1266	06:1...	0	31	06:1...	0	15	06:1...	0
COA89286:0135872AAE33:B205:002BB514	14814	0	0	06:1...	0	0	06:1...	0	0	06:1...	0	1266	06:1...	0	15	06:1...	0	15	06:1...	0
COA89286:0135872AFA22:88CD:00872380	7376	0	0	06:1...	0	0	06:1...	0	0	06:1...	0	1000	06:1...	0	16	06:1...	0	16	06:1...	0
COA89286:0135872B124F:D919:002BB514	8126	0	0	06:1...	0	0	06:1...	0	0	06:1...	0	1015	06:1...	0	0	06:1...	0	0	06:1...	0
COA89286:0135872B3ECF:BCD4:00872380	7719	0	0	06:1...	0	0	06:1...	0	0	06:1...	0	1015	06:1...	0	0	06:1...	0	0	06:1...	0
COA89286:0135872B5C4A:7AD8:002BB514	7673	0	0	06:1...	0	0	06:1...	0	0	06:1...	0	1016	06:1...	0	31	06:1...	0	31	06:1...	0
COA89286:0135872B84E2:C6AE:00872380	6126	0	0	06:1...	0	0	06:1...	0	0	06:1...	0	1016	06:1...	0	15	06:1...	0	15	06:1...	0
COA89286:0135872BA4DF:6F6E:002BB514	6735	0	0	06:1...	0	0	06:1...	0	0	06:1...	0	1015	06:1...	0	16	06:1...	0	16	06:1...	0
COA89286:0135872BC671:D4B4:00872380	6907	0	0	06:1...	0	0	06:1...	0	0	06:1...	0	1016	06:1...	0	0	06:1...	0	0	06:1...	0
COA89286:0135872BE95B:8EF8:002BB514	0	0	0	06:1...	0	0	06:1...	0	0	06:1...	0	1000	06:1...	0	16	06:1...	0	16	06:1...	0

The interface also includes an "Infrastructure" section, a "Transaction" table, and a bottom navigation bar with options: BTM View, BTM History View, Daily Report, Monthly Report, and Yearly Report.

BMTM-TM : Analyse d'une transaction échouée avec MV/TA

BMC Middleware Management - Transaction Monitoring - bdc-bmm - [BMC MVTA Shopping Zone!Online Store V3 Generated 06/21/2011 04:26:22]

File Edit Tools View Window Help

Operations | History | Events | Security | BTM

Begin → Windows QM Request → zOS QM In → CICS Invocation → IMS Update → DB2 Update → zOS QM Out → Windows QM Reply → End

Transaction: MAINVIEW Transaction Analyzer

Transaction	Windows QM Request	IMS Update	DB2 Update
MOS	0	0	0
M	0	04:5...	04:5...
M	0	05:4...	05:4...

- Correlation by Alias Data, Activity End Time
- Correlation by Alias Data, Transaction End Time
- Correlation by Alias Data, Transaction End Time, Level
- Correlation by CICSZ, Activity End Time
- Correlation by CICSZ, Transaction End Time
- Correlation by Message ID
- Correlation by Message ID, Level
- Correlation by Message ID, Queue Manager
- Correlation by Message ID, Queue Manager, Level
- MQ Component List
- MQ Component List by Queue
- MQ Component List by Queue Manager
- MQ Component List by Queue Manager, Queue

BTM View | 11:08:28 AM

BMTM-TM : Analyse d'une transaction échouée avec MV/TA



BMC Middleware Management - Transaction Monitoring - bdc-bmm - [BMC MVTA Shopping Zone!Online Store V3 Generated 06/21/2011 04:26:22]

File Edit Tools View Window Help

Operations | History | Events | Security | BTM

URL Configuration

URL: http://sysb.bmc.com:3940/default.ehtml?link=transfer SYSBDEMO mvta QCORR;setMQS mi=414D512043513032582...

URL Prefix: http://sysb.bmc.com:3940/default.ehtml

URL Segment List:

Description	Value
link	?link=transfer
MVTA Context	SYSBDEMO
transfer	mvta
MQ	QCORR;setMQS mi=
Transaction Alias	414D512043513032582020202020DD0DF14D203...
Time Range	414D512043513032582020202020DD0DF14D2033F80D
Transaction Begin Time	2011062121562400
Transaction End Time	1970010100000100
Level	lv=
MQ Level	

OK Cancel

Transaction	Windows QM Request	zOS QM In	CICS Invocation	IMS Update	DB2 Update
MQS... 0	0 0 04:5...	0 0 04:5...	0 0 04:5...	0 0 04:5...	0 0 04:5...
MQS... 0	0 0 04:5...	0 85 04:5...	0 0 04:5...	0 0 04:5...	0 0 04:5...
MQS... 223	0 0 05:4...	0 0 05:4...	0 0 05:4...	0 0 05:4...	0 0 05:4...

BTM View | BTM History View | Daily Report | Monthly Report | Yearly Report

A E H T 11:11:52 AM

BMTM-TM : Analyse d'une transaction échouée avec MV/TA

The screenshot displays the BMC MainView Explorer interface. The main window shows a table of transaction components for a failed transaction. The table has the following columns: UTC Start Time, Elapsed Time, Tran Env, Complex Transaction Component, MQ Func, MQ GET Latency, and Tran ID. The data rows show a sequence of MQ and CICS operations, including MQGET, MQPUT, and MQGET, with various latency values. The transaction ID is consistently BAD1.

UTC Start Time	Elapsed Time	Tran Env	Complex Transaction Component	MQ Func	MQ GET Latency	Tran ID
21:56:24.93	00:00:00.12	CICS	BAD1 #3956			
21:56:25.05	00:00:00.00	MQ	_MQGET	GET	0.338049	
21:56:25.05	00:00:00.00	MQ	_MQPUT	PUT		
21:56:25.06	00:00:00.00	MQ	_MQGET	GET	0.011320	
21:56:25.05	00:00:00.01	CICS	_BAD1 #3957			BAD1
21:56:25.06	00:00:00.00	MQ	_MQPUT	PUT		
21:56:25.06	00:00:00.00	MQ	_MQGET	GET	0	
21:56:25.06	00:00:00.00	CICS	_BAD1 #3958			BAD1
21:56:25.06	00:00:00.00	MQ	_MQPUT	PUT		
21:56:25.06	00:00:00.00	MQ	_MQGET	GET	0	
21:56:25.06	00:00:00.01	CICS	_BAD1 #3959			BAD1
21:56:25.06	00:00:00.00	MQ	_MQPUT	PUT		
21:56:25.07	00:00:00.00	MQ	_MQGET	GET	0.012284	
21:56:25.07	00:00:00.00	CICS	_BAD1 #3960			BAD1
21:56:25.07	00:00:00.00	MQ	_MQPUT	PUT		
21:56:25.08	00:00:00.00	MQ	_MQGET	GET	0.014777	
21:56:25.07	00:00:00.01	CICS	_BAD1 #3961			BAD1

Command: Send Recall

QCORR - MVTA @ SYSBDEMO Jun 22, 2011 11:22:09 AM 1 of 17

Daily Transaction Summary Report

	A	C	D	E	F	G	H	I
1	SLA Transaction Delivery Daily Summary							
3			Begin Date:		5-Feb-09	12:00:00 AM		
4			End Date:		6-Feb-09	12:00:00 AM		
5	Elapsed Time (ms)				Transaction			
6		Min	Avg	Max	Over Threshold	Under Threshold	Com	
7	12:00 AM	0.00	12050.72	26953.00	178	0		
8	1:00 AM	0.00	14115.00	28922.00	216	0		
9	2:00 AM	0.00	13794.03	28406.00	241	0		
10	3:00 AM	0.00	14445.10	26625.00	280	0		
11	4:00 AM	0.00	13684.65	28000.00	327	0		
12	5:00 AM	0.00	13245.15	28078.00	216	0		
13	6:00 AM	0.00	12725.13	28265.00	363	0		
14	7:00 AM	0.00	13966.50	27907.00	336	0		
15	8:00 AM	0.00	89333.15	2086031.00	111	0		
16	9:00 AM	0.00	11007105.17	37527171.00	526	0		
17	10:00 AM	0.00	12961.78	27515.00	270	0		
18	11:00 AM	0.00	14542.63	29797.00	320	0		
19	12:00 PM	0.00	12226.18	27141.00	301	0		

Daily Summary

Overview | Hourly Summary | Daily Summary | Current Values | Daily Report | Weekly Report | Monthly Report | History Charts

SLA

- ▶ Rapports journaliers, hebdomadaires et mensuels disponibles

Daily Transaction Payload Data Summary Report

	A	C	D	E	F	G	H
1	Transaction Payload Data Daily Summary						
3			Begin Date:		5-Feb-09	12:00:00 AM	
4			End Date:		6-Feb-09	12:00:00 AM	
5	Current Payload Data						
6		Min	Avg	Max	Total	Count	Last
7	12:00 AM	0	123	402	49,717	402	160.84
8	1:00 AM	0	133	354	31,057	234	123.87
9	2:00 AM	0	108	442	26,401	205	294.73
10	3:00 AM	0	123	414	61,211	494	108
11	4:00 AM	0	123	394	64,900	519	170.27
12	5:00 AM	0	117	377	57,075	474	64.47
13	6:00 AM	0	120	433	59,509	490	122.24
14	7:00 AM	0	123	404	67,590	538	287.83
15	8:00 AM	0	125	359	23,277	186	0
16	9:00 AM	0	108	421	58,868	456	96.76
17	10:00 AM	0	124	393	45,236	370	16.23
18	11:00 AM	0	126	407	71,494	565	59.8
19	12:00 PM	0	110	386	49,540	386	174.21

Daily Summary

Current | Hourly | Daily | Properties | Daily Report | Weekly Report | Monthly Report | History Charts

Valeur Métier

- ▶ **Suivi des Transactions de bout en bout**
 - Nombreuses technologies supportées
 - API
- ▶ **Monitoring SLA**
- ▶ **Alertes et automatisation**
 - Quantification des transactions
 - Timeout
 - Echec
 - Données métier
 - Performance & disponibilité
- ▶ **Tableaux de bords**
 - Vues d'infrastructures
 - Vues métiers
- ▶ **Intégration MVTA**
- ▶ **Collecte de l'historique et Reporting**
 - Stockage et présentation des données métier et techniques

BMM

Middleware Administration

WebSphere MQ & TIBCO EMS

(anciennement AppWatch)

► Sécurité

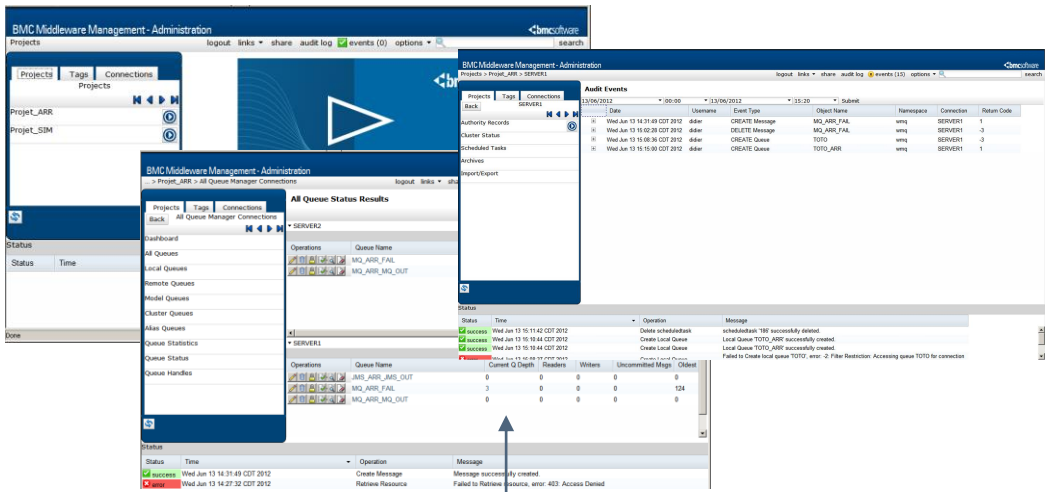
- Gestion centralisée
- Basée sur des projets et des rôles
- Sécurité facile à gérer
- Journaux d'audit
- Intégration avec Active Directory

► Productivité

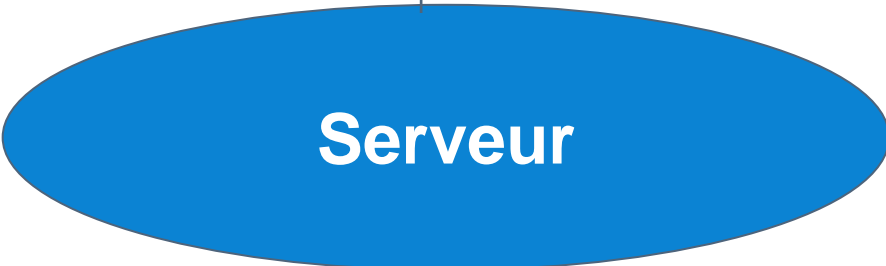
- Permet aux administrateurs de déléguer les tâches répétitives tout en gardant le contrôle
- Permet aux Testeurs et aux Développeurs d'accéder à tout ce dont ils ont besoin

► Efficacité

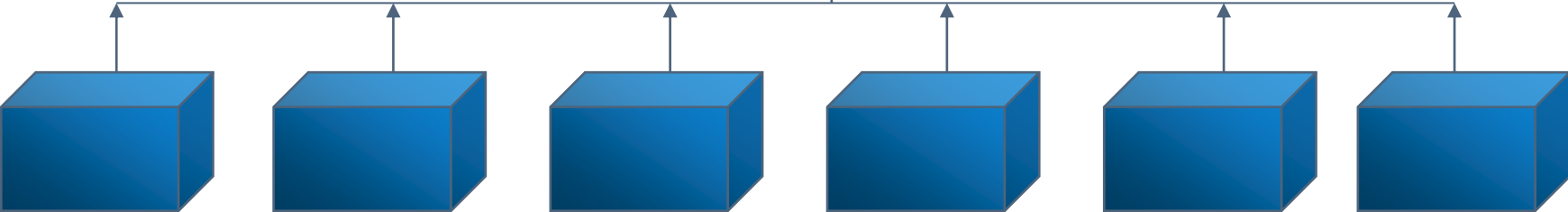
- Visualisation des Files par projet.. Fini les recherches pénibles !
- WebSphere MQ et TIBCO EMS
- Rien à installer sur les postes clients



Poste Client
Navigateur web



Services
Windows
Linux



Serveurs
WMQ & TIBCO EMS
Pas besoin d'agents

N'importe quelle plate-forme WebSphere MQ * *supportant les connexions par un Canal Client

**Administrateurs
Infrastructure**

Projet « TRADE »

Sous-Projet 1

Trade Dev

QM 1

Jean

QM 2

Michel

Server X

Jean et Michel

**Chef de
Projet 1**

Sous-Projet 2

Trade B2B

QM 3

Carole

Server Y

Anne

Serveur Z

Carole et Anne

**Chef de
Projet 2**

L'accès aux objets des Serveurs EMS et QMgrs WMQ sont définis dans autant de projets et sous-projets que nécessaire

- ▶ **Inquire**
 - L'utilisateur peut voir tous les objets du projet et leurs propriétés
 - L'utilisateur ne peut pas visualiser les messages
- ▶ **Read**
 - Autorise l'utilisateur à voir les messages
- ▶ **Write**
 - Permet à l'utilisateur de créer ou modifier des messages
- ▶ **Delete**
 - Autorise la suppression de messages
- ▶ **Operator**
 - Permet les opérations d'administration
 - L'utilisateur ne peut pas supprimer des objets ou en créer de nouveaux
- ▶ **Administration**
 - Permet l'administration, la suppression et la créations d'objets

Un ou plusieurs niveaux d'autorisations sont affectés à chaque utilisateur, ou groupe d'utilisateurs, pour l'accès aux projets.

BMM-Admin : Local Queues (WMQ)

BMC Middleware Management - Administration

... > Projet_ARR > All Queue Manager Connections

logout links share audit log events (0) options search

All Local Queues

share filter: regexp: filter

SERVER2

Operations	Queue Name	Current Q Depth	Max Q Depth	Readers	Writers	U
	MQ_ARR_FAIL	0	5000	0	0	N
	MQ_ARR_MQ_OUT	0	5000	0	0	N

Edit | Delete | MQ Security | Audit | Message Mgmt | Clear Q | Tag

Operations	Queue Name	Current Q Depth	Max Q Depth	Readers	Writers	U
	JMS_ARR_JMS_OUT	0	5000	0	0	N
	MQ_ARR_FAIL	3	5000	0	0	N
	MQ_ARR_MQ_OUT	0	5000	0	0	N

Status

Status	Time	Operation	Message
<input checked="" type="checkbox"/> success	Wed Jun 13 14:31:49 CDT 2012	Create Message	Message successfully created.
<input checked="" type="checkbox"/> error	Wed Jun 13 14:27:32 CDT 2012	Retrieve Resource	Failed to Retrieve resource, error: 403: Access Denied

The screenshot shows the BMC Middleware Management - Administration interface. The breadcrumb path is "... > Projet_ARR > All Queue Manager Connections". The main content area is titled "All Queues" and displays a table of queues for two servers: SERVER2 and SERVER1. Both servers have a queue named "MQ_ARR_MQ_OUT" with a type of "LOCAL", a current depth of 0, and a default persistence of "NOT_PERSISTENT". A search filter is applied to the table, showing "filter: *MQ_OUT" and "regex: filter". The left sidebar contains a navigation menu with "Local Queues" circled in orange. A text box with an arrow pointing to the filter field contains the text: "Uniquement les queues dont le nom se termine par « MQ_OUT". At the bottom, a "Status" table shows two entries: a successful "Create Message" operation and an error "Retrieve Resource" operation with message "Failed to Retrieve resource, error: 403: Access Denied".

Operations	Queue Name	Type	Current Q Depth	Default Persistence
	MQ_ARR_MQ_OUT	LOCAL	0	NOT_PERSISTENT

Operations	Queue Name	Type	Current Q Depth	Default Persistence
	MQ_ARR_MQ_OUT	LOCAL	0	NOT_PERSISTENT

Status	Time	Operation	Message
success	Wed Jun 13 14:31:49 CDT 2012	Create Message	Message successfully created.
error	Wed Jun 13 14:27:32 CDT 2012	Retrieve Resource	Failed to Retrieve resource, error: 403: Access Denied

BMM-Admin : Gestion des messages

BMC Middleware Management - Administration

... > Projet_ARR > All Queue Manager Connections

SERVER1: Messages For Queue MQ_ARR_FAIL

Operations

Operations	Index	Put Date/Time	Put Application	Size (bytes)	Format	Code F
	1	mercredi 13 juin 2012 14:30:13	J:\mqm\bin\amqs 9		MQSTR	819
	2	mercredi 13 juin 2012 14:30:31	J:\mqm\bin\amqs 14		MQSTR	819
	3	mercredi 13 juin 2012 14:31:49	WebSphere MQ Client for Java	15		437

Status

Status	Time	Operation	Message
success	Wed Jun 13 14:31:49 CDT 2012	Create Message	Message successfully created.
error	Wed Jun 13 14:27:32 CDT 2012	Retrieve Resource	Failed to Retrieve resource, error: 403: Access Denied

New, Upload/Import, Move, Copy, Save to File, Delete, Cancel
Browse, Edit

SERVER1: Properties for New Local Queue

Schedule Task

Start Time: 15:08
Start Date: 13/06/2012
Repeat Count: 0
Repeat Interval: 0 seconds

Schedule Cancel

On peut différer la création ou la modification d'un objet

Status	Time	Operation	Message
error	Wed Jun 13 15:08:37 CDT 2012	Create Local Queue	Failed to Create local queue 'TOTO', error: -2: Filter Restriction: Accessing queue TOTO for connection SERVER1 failed for user didier
error	Wed Jun 13 15:07:16 CDT 2012	Retrieve Resource	Failed to Retrieve resource, error: 403: Access Denied

BMC Middleware Management - Administration

Projects > Projet_ARR > SERVER1

logout links share audit log events (15) options search

SERVER1: Scheduled Tasks

auto refresh off refresh

share filter: regexp: filter

Operations	Id	Status	Namespace	Connection	Start Time	Create Time	User	Description
	185	COMPLETED	wmq	SERVER1	Wed Jun 13 15:15:00 CDT 2012	Wed Jun 13 15:10:44 CDT 2012	didier	Create WMQ local queue for connection SERVER

Scheduled Tasks

Scheduled Tasks

Status

Status	Time	Operation	Message
success	Wed Jun 13 15:11:42 CDT 2012	Delete scheduledtask	scheduledtask '186' successfully deleted.
success	Wed Jun 13 15:10:44 CDT 2012	Create Local Queue	Local Queue 'TOTO_ARR' successfully created.
success	Wed Jun 13 15:10:44 CDT 2012	Create Local Queue	Local Queue 'TOTO_ARR' successfully created.
			Failed to Create local queue 'TOTO' error: -2: Filter Restriction: Accessing queue TOTO for connection

BMM-Admin : Audit Log

BMC Middleware Management - Administration

Projects > Projet_ARR > SERVER1

logout links share **audit log** events (15) options search

Audit Events

13/06/2012 00:00 13/06/2012 15:20 Submit

Date	Username	Event Type	Object Name	Namespace	Connection	Return Code
Wed Jun 13 14:31:49 CDT 2012	didier	CREATE Message	MQ_ARR_FAIL	wmq	SERVER1	1
Wed Jun 13 15:02:28 CDT 2012	didier	DELETE Message	MQ_ARR_FAIL	wmq	SERVER1	-3
Wed Jun 13 15:08:36 CDT 2012	didier	CREATE Queue	TOTO	wmq	SERVER1	-3
Wed Jun 13 15:15:00 CDT 2012	didier	CREATE Queue	TOTO_ARR	wmq	SERVER1	1

Status

Status	Time	Operation	Message
success	Wed Jun 13 15:11:42 CDT 2012	Delete scheduledtask	scheduledtask '186' successfully deleted.
success	Wed Jun 13 15:10:44 CDT 2012	Create Local Queue	Local Queue 'TOTO_ARR' successfully created.
success	Wed Jun 13 15:10:44 CDT 2012	Create Local Queue	Local Queue 'TOTO_ARR' successfully created.
error	Wed Jun 13 15:08:37 CDT 2012	Create Local Queue	Failed to Create local queue 'TOTO', error: -2: Filter Restriction: Accessing queue TOTO for connection

The screenshot shows the 'BMC Middleware Management - Administration' interface. At the top, there is a navigation bar with 'Admin', 'user console', 'logout', 'share', 'audit log', 'events (0)', and 'options'. The 'events (0)' link is circled in orange. On the left, a sidebar contains navigation links for 'Admin', 'Users', 'Groups', 'Projects', 'Filters', 'Product Administrators', 'Settings', 'Security', 'Product Key', 'WMQ Connections', and 'EMS Connections'. The main area displays a configuration form for a monitoring rule. The 'Rule Type' is set to 'Queue more than N percent full'. The 'Rule Name' is 'Queue more than N percent full'. The 'State' is 'On'. The 'Object Name' is 'Queue Percent Full'. The 'Action' is 'E-Mail'. The 'Rule effective day and time' section has checkboxes for 'Mon', 'Tue', 'Wed', and 'Thu' all checked, and a 'Start Time' of '00:00'. A dropdown menu is open, showing a list of rule types including 'Queue more than N percent full', 'QMgr not accessible', 'Message in DLQ', 'Queue Full', 'Command Server Down', 'XMIT queue not serviced', 'Channel retrying and XMIT queue not empty', 'Channel retrying', 'Channel in doubt', 'Channel stopped', 'Queue has more than N msgs', 'Queue has more than N msgs and no readers', 'Queue is more than N percent full and has no readers', 'Queue has less than N readers', 'Queue has less than N writers', 'Server conn channel has more than N running instances', 'Total running channel count is more than N', 'XMIT queue has more than N msgs', 'XMIT queue is more than N percent full', 'First msg on queue waiting more than N seconds', 'Oldest msg on queue waiting more than N seconds', 'Oldest msg on XMIT queue waiting more than N seconds', 'Trigger monitor is not running', and 'Channel initiator is not running'. An orange arrow points from the text box to the 'events (0)' link, and another orange arrow points from the text box to the dropdown menu.

Des règles de surveillance peuvent être paramétrées pour prévenir les utilisateurs d'événements critiques sur les objets de leurs projets

- ▶ Solution complète d'administration WMQ et TIBCO EMS
 - Aucun logiciel à installer sur les postes clients
 - Facilité d'utilisation
 - Self Service
- ▶ Accès sécurisé aux ressources
 - Limitation de la visibilité des ressources par projet
- ▶ Amélioration immédiate de l'efficacité
 - Développeurs, Analystes et Administrateurs
- ▶ Scheduling
- ▶ Audit Log
- ▶ Monitoring

Questions?