



IBM Software Group

# ***IBM WebSphere® Data Interchange V3.3***

## ***WDI and WMQ Overview***



@business on demand.

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This presentation will give an overview of WDI and WMQ.

## Goals

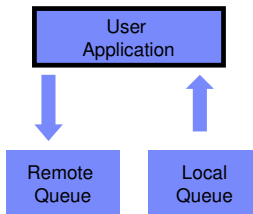
- WMQ Configuration tasks
- WDI Client Setup
- WMQ Trigger Monitor
- WDI Adapter
- Command Chaining
- WDI Client MCD Profile



The presentation covers the basic steps required for WDI and WMQ configuration.

## WebSphere MQ Configuration – Tasks

- Create necessary objects
  - ▶ Create a Queue Manager
  - ▶ Create a Local Queue
  - ▶ Create a Remote Queue



The first task is to configure WMQ and create the objects for a Queue Manager, Local Queue, and Remote Queue.

## Creating A Queue Manager

- AIX or windows command line use `crtmqm` command.
  - ▶ The '-q' option will make the new Queue Manager the default queue manager.
- WMQ Explorer can be used to create queue managers on Windows platform.



For AIX or Windows you can use the command line command `crtmqm` or you can use WMQ Explorer.

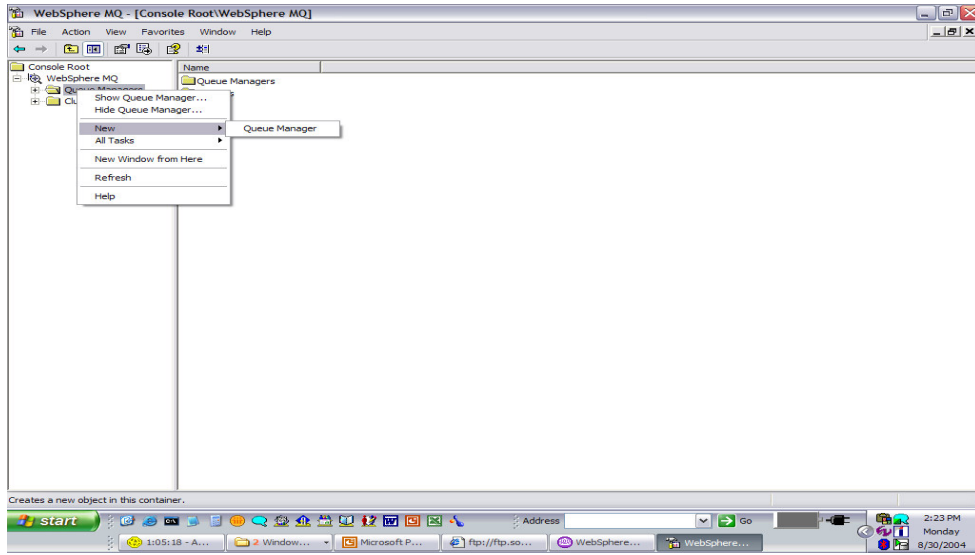
## WebSphere MQ Configuration – Tools

- WebSphere MQ provides two ways to manage AIX and Windows Queue Managers:
  - ▶ WebSphere MQ Explorer
  - ▶ WebSphere Command Line (Scripting Interface)



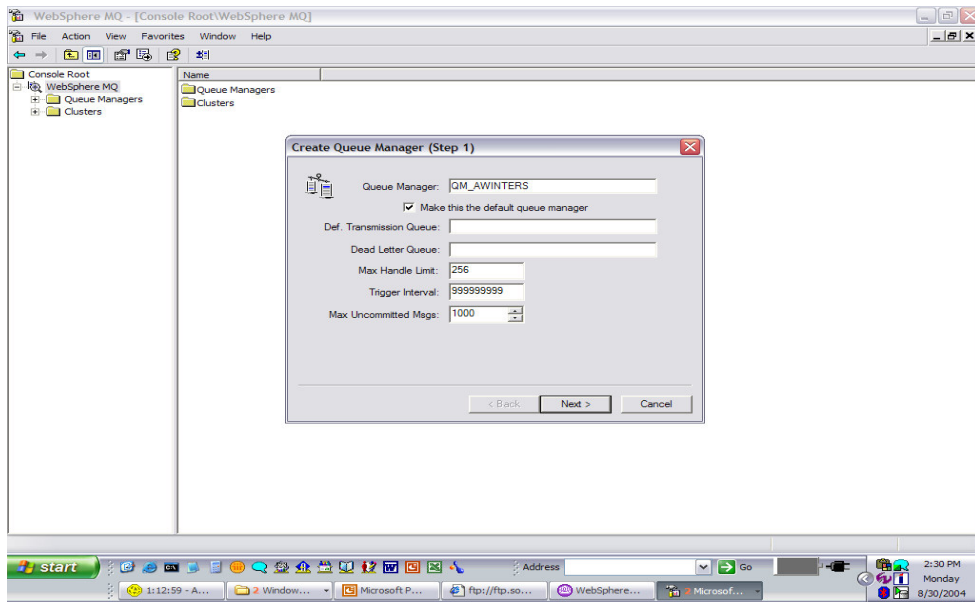
There are two ways to manage the Queue Managers WMQ Explorer and the command line or scripting interface.

# WMQ Queue Manager

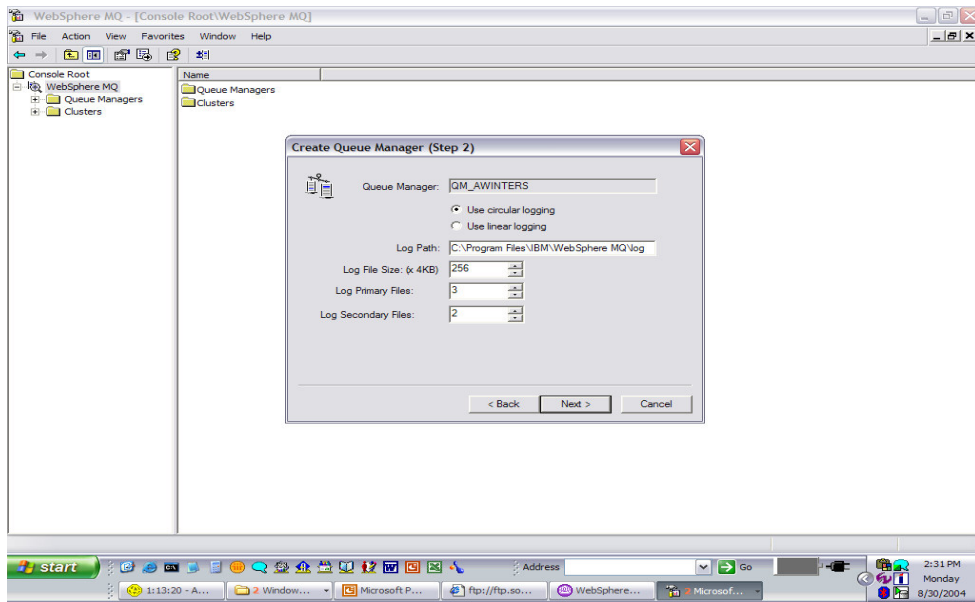


This is an example of using WMQ Explorer.

# WMQ Queue Manager

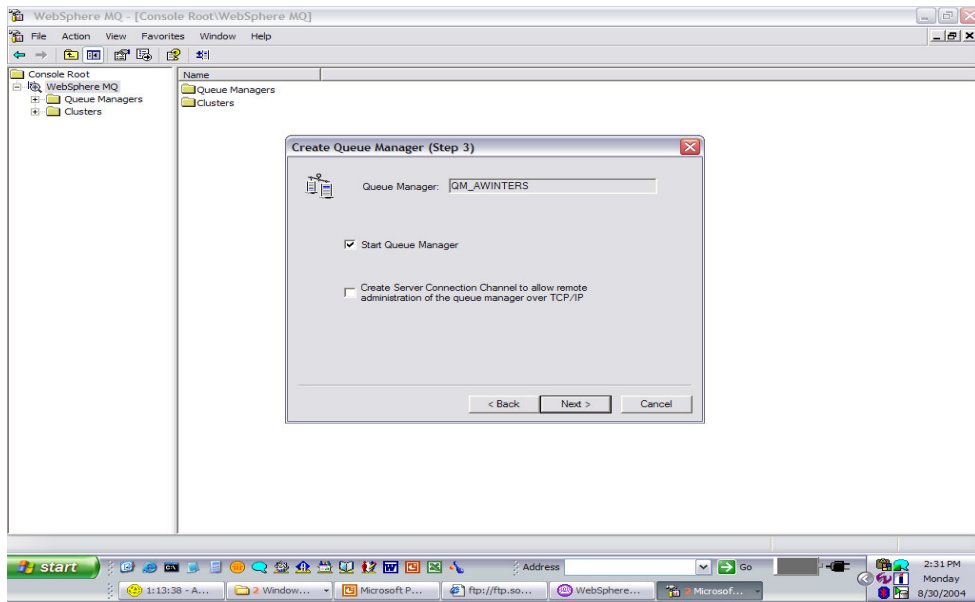


# WMQ Queue Manager

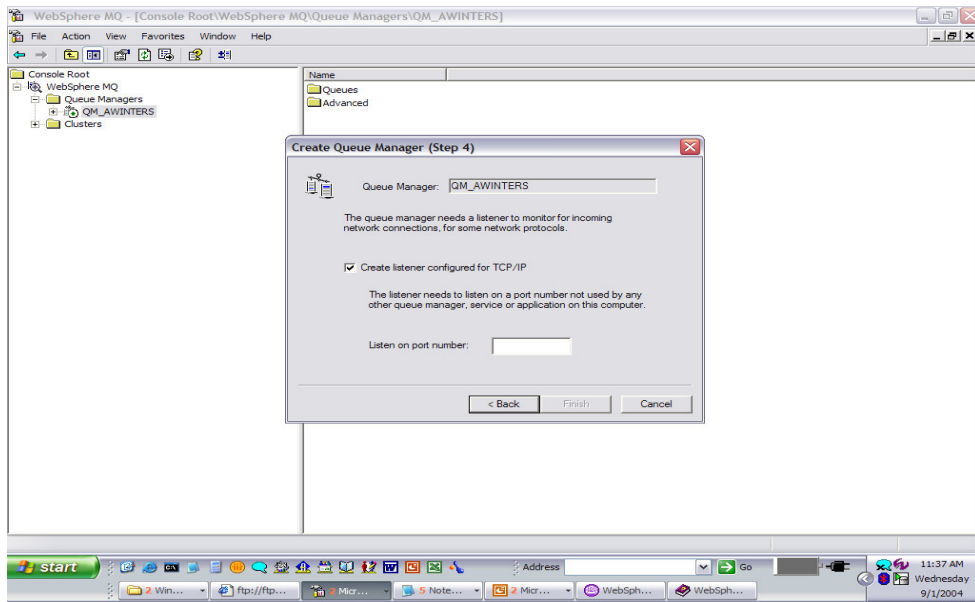




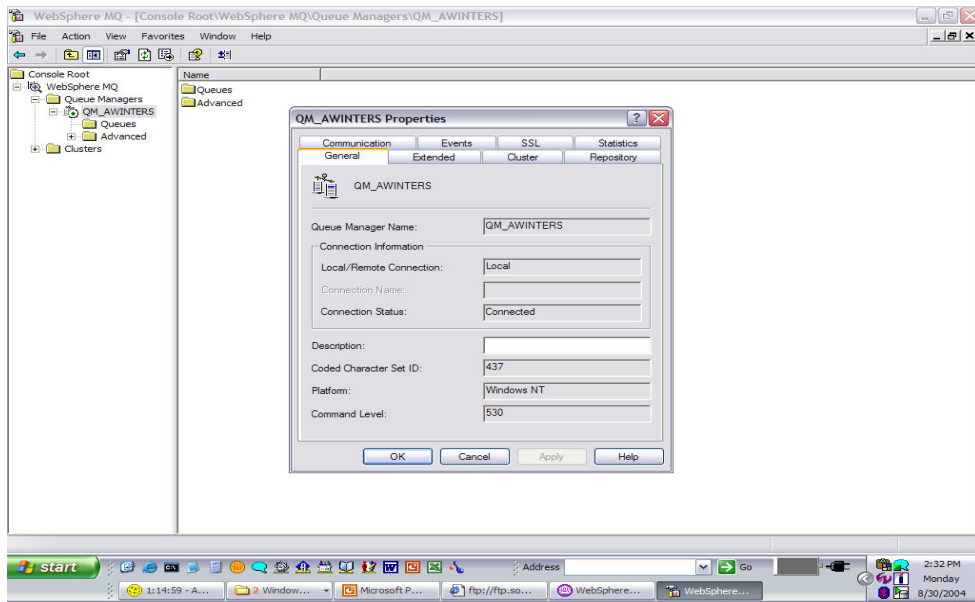
# WMQ Queue Manager



# WMQ Queue Manager



# WMQ Queue Manager



## WebSphere MQ Command Line Interface

- Command line interface can be used to execute scripts containing WMQ commands for creating or altering MQ objects
- WebSphere Data Interchange provides a script of WMQ commands.

## WebSphere Data Interchange sample script

```

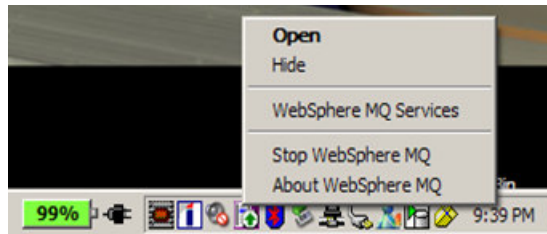
wdimqcommands.txt - Notepad
File Edit Format View Help
*****
* Program name: wdimqcommands.txt
* Description: builds MQ queues for the WDI Default Installation
* Use: Use this file as standard input for 'runmqsc'.
*       runmqsc QMgr < wdimqcommands.txt
* To change the home directory for the WDIAdapter, alter the
*   USERDATA in the PROCESS definition.
*   ENVRDATA to locate the trace file.
*****
*
*
*****
* Create the process definition with information for the
* WDIAdapter initialization
*****
DEFINE PROCESS ('WDI.PROC') REPLACE +
  DESCR ('WebSphere Data Interchange Adapter') +
  APPLCID ('WDIAdapter.exe') +
  APPLTYPE (DEF) +
  USERDATA ('C:\Program Files\IBM\WdiServer\V3.3\runtime\dicmd') +
  ENVRDATA ('>> "C:\Program Files\IBM\WdiServer\V3.3\runtime\prt\WDIAdapter.trace"')
*****
* Create the input and output queues as local.
* Input queues will cause a trigger message
*****
DEFINE QLOCAL ('WDI.FAILURE.Q') REPLACE +
  DESCR ('WDI Failure Queue') +
  MAXMSGL (2194304) +
  DEFSIST (YES) +
  BOTHRESH (0) +
  SHARE +
  GET (ENABLED) +
  PUT (ENABLED)
*****
DEFINE QLOCAL ('WDI.INIT.Q') REPLACE +
  DESCR ('WDI Trigger Initiation Queue') +
  LIKE (SYSTEM.DEFAULT.INITIATION.QUEUE)
*****
DEFINE QLOCAL ('ADF.IN') REPLACE +
  DESCR ('Application data for WDI translation') +

```

The sample script defines all the default WMQ objects required by WebSphere Data Interchange and is located in `WdiServer\V3.3\samples\wdimqcommands.txt`

## Queue Manager Requirements

- Start a command server on queue manager
  - ▶ On AIX issue the command “/usr/mqm/bin/strmqcsv”
  - ▶ On windows use WebSphere MQ Services tool



## Define Message Queues

- \WDIServer\V3.3\samples\wdi\_mq\_setup.txt
  - ▶ Contains WMQ setup for default configuration
  - ▶ The following WMQ objects are created:
    - WDI.PROC - WDI Trigger Process Definition
    - WDI.FAILURE.Q - Failure Queue
    - WDI.INIT.Q - Trigger Initiation Queue
    - ADF\_IN - Application data queue for WDI translation
    - EDI\_IN - EDI data queue for WDI translation
    - XML\_IN - XML data queue for WDI translation
    - ADF\_OUT - Application data queue from WDI translation
    - EDI\_OUT - EDI data queue from WDI translation
    - XML\_OUT - XML data queue from WDI translation

## Define Message Queues

- `runmqsc < wdimqcommands.txt`
- If the default queue manager is not used then use it as the first parameter:
- `runmqsc qmanager_name < wdimqcommands.txt`
- substitute the name of the queue manager for qmanager name shown above.



# Results - runmqsc < wdimqcommands.txt

The screenshot shows the IBM WebSphere MQ console interface. The left pane displays a tree view of the console structure, including Queue Managers, Queues, Advanced, Channels, Client Connections, Process Definitions, NameLists, Authentication Information, Cluster Queue Managers, and Clusters. The right pane shows a table of process definitions for the selected 'WDI.PROC'.

| Name     | Application Type | Application ID | Description | Environment Data   | User Data   | Alteration Date (GMT) |
|----------|------------------|----------------|-------------|--------------------|-------------|-----------------------|
| WDI.PROC | Windows NT       | WDIAdspoter... | WebSpher... | >> %C:\WDIServe... | G:\WDISe... | 2004-08-17            |

# Results - runmqsc < wdimqcommands.txt

The screenshot shows the WebSphere MQ console interface. A table at the top lists process definitions, with 'WDI.PROC' selected. Below the table, the 'WDI.PROC Properties' dialog box is open, displaying the following details:

| Name     | Application Type | Application ID | Description  | Environment Data  | User Data  | Alteration Date (GMT) |
|----------|------------------|----------------|--------------|-------------------|------------|-----------------------|
| WDI.PROC | Windows NT       | WDIAdapter...  | WebSphere... | >> ^C:WDIServe... | C:WDISe... | 2004-08-17            |

The 'WDI.PROC Properties' dialog box (General tab) contains the following fields:

- Process Definition Name: WDI.PROC
- Description: WebSphere Data Interchange Ada
- Application Type: Windows NT
- Application Identifier: WDIAdapter.exe
- Environment Data: ^>> ^C:\WDIServer32\runtime\prt\
- User Data: C:\WDIServer32\runtime\dicmd
- Alteration Date: 8/17/2004
- Alteration Time: 6:58:39 AM

The Windows taskbar at the bottom shows the system clock as 12:51 PM on Tuesday, 8/31/2004. The taskbar includes icons for Start, Internet Explorer, Notepad, and several instances of the WebSphere MQ console.

# Results - runmqsc < wdimqcommands.txt

The screenshot shows the WebSphere MQ console interface. The main window displays a table of queue configurations. The table has the following columns: Name, Queue Type, Cluster Name, Cluster NameList, Hosting Queue Manager, Cluster Queue Type, Current Depth, and Description. The data in the table is as follows:

| Name          | Queue Type     | Cluster Name | Cluster NameList | Hosting Queue Manager | Cluster Queue Type | Current Depth | Description    |
|---------------|----------------|--------------|------------------|-----------------------|--------------------|---------------|----------------|
| ADF_IN        | Local          |              |                  |                       |                    | 0             | Application... |
| ADF_OUT       | Local          |              |                  |                       |                    | 0             | Application... |
| EDI_IN        | Local          |              |                  |                       |                    | 0             | EDI data f..   |
| EDI_OUT       | Local          |              |                  |                       |                    | 0             | EDI data fr.   |
| SPIDERMAN     | Remote Defi... |              |                  |                       |                    |               |                |
| TO_SPIDERMAN  | Local          |              |                  |                       |                    | 0             | WebSpher..     |
| WDI_FAILURE.Q | Local          |              |                  |                       |                    | 0             | WDI Failur..   |
| WDI_INIT.Q    | Local          |              |                  |                       |                    | 0             | WDI Trigge...  |
| XML_IN        | Local          |              |                  |                       |                    | 0             | XML data f.    |
| XML_OUT       | Local          |              |                  |                       |                    | 0             | XML data f.    |

The console window also shows a tree view on the left with 'Queue Managers' expanded to 'QM\_AWINTERS' and 'Queues'. The Windows taskbar at the bottom shows the time as 4:18 PM on Monday, 8/30/2004.

# Define Message Queues

| Name          | Queue Type | Cluster Name | Cluster Namelist | Hosting Queue Manager | Cluster Queue Type | Current Depth | Description    |
|---------------|------------|--------------|------------------|-----------------------|--------------------|---------------|----------------|
| ADF_IN        | Local      |              |                  |                       |                    | 0             | Application... |
| ADF_OUT       | Local      |              |                  |                       |                    | 0             | Application... |
| EDI_IN        |            |              |                  |                       |                    | 0             | EDI data f...  |
| EDI_OUT       |            |              |                  |                       |                    | 0             | EDI data f...  |
| TO_SPIDERMAN  |            |              |                  |                       |                    | 0             | WebSpher...    |
| WDI_FAILURE.Q |            |              |                  |                       |                    | 0             | WDI Failur...  |
| WDI_INIT.Q    |            |              |                  |                       |                    | 0             | WDI Triggs...  |
| XML_IN        |            |              |                  |                       |                    | 0             | XML data f...  |
| XML_OUT       |            |              |                  |                       |                    | 0             | XML data f...  |

# Remote Queues

WebSphere MQ - [Console Root\WebSphere MQ\Queue Managers\QM\_AWINTERS\Queues]

| Name          | Queue Type        | Cluster Name | Cluster NameList | Hosting Queue Manager | Cluster Queue Type | Current Depth |
|---------------|-------------------|--------------|------------------|-----------------------|--------------------|---------------|
| ADF_IN        | Local             |              |                  |                       |                    | 0             |
| ADF_OUT       | Local             |              |                  |                       |                    | 0             |
| EDI_IN        | Local             |              |                  |                       |                    | 0             |
| EDI_OUT       | Local             |              |                  |                       |                    | 0             |
| SPIDERMAN     | Remote Definition |              |                  |                       |                    |               |
| TO_SPIDERMAN  | Local             |              |                  |                       |                    | 0             |
| WDI.FAILURE.Q | Local             |              |                  |                       |                    | 0             |
| WDI.INT..Q    | Local             |              |                  |                       |                    | 0             |
| XML_IN        | Local             |              |                  |                       |                    | 0             |
| XML_OUT       | Local             |              |                  |                       |                    | 0             |

# Remote Queues

| Name          | Queue Type | Cluster Name | Cluster NameList | Hosting Queue Manager | Cluster Queue Type | Current Depth |
|---------------|------------|--------------|------------------|-----------------------|--------------------|---------------|
| ADF_IN        | Local      |              |                  |                       |                    | 0             |
| ADF_OUT       | Local      |              |                  |                       |                    | 0             |
| EDI_IN        |            |              |                  |                       |                    | 0             |
| EDI_OUT       |            |              |                  |                       |                    | 0             |
| SPIDERMAN     |            |              |                  |                       |                    | 0             |
| TO_SPIDERMAN  |            |              |                  |                       |                    | 0             |
| WDI.FAILURE.Q |            |              |                  |                       |                    | 0             |
| WDI.INT.Q     |            |              |                  |                       |                    | 0             |
| XML_IN        |            |              |                  |                       |                    | 0             |
| XML_OUT       |            |              |                  |                       |                    | 0             |

# Remote Queues

The screenshot shows the WebSphere MQ console interface. A table lists several queues, and a dialog box is open for the 'TO\_SPIDERMAN' queue.

| Name          | Queue Type | Cluster Name | Cluster NameList | Hosting Queue Manager | Cluster Queue Type | Current Depth |
|---------------|------------|--------------|------------------|-----------------------|--------------------|---------------|
| ADF_IN        | Local      |              |                  |                       |                    | 0             |
| ADF_OUT       | Local      |              |                  |                       |                    | 0             |
| EDI_IN        | Local      |              |                  |                       |                    | 0             |
| EDI_OUT       | Local      |              |                  |                       |                    | 0             |
| SPIDERMAN     | Local      |              |                  |                       |                    | 0             |
| TO_SPIDERMAN  | Local      |              |                  |                       |                    | 0             |
| WDL_FAILURE.Q | Local      |              |                  |                       |                    | 0             |
| WDL.INT.Q     | Local      |              |                  |                       |                    | 0             |
| XML_IN        | Local      |              |                  |                       |                    | 0             |
| XML_OUT       | Local      |              |                  |                       |                    | 0             |

**TO\_SPIDERMAN Properties**

General | Extended | Cluster | Triggering | Events | Storage | Statistics

Queue Name: TO\_SPIDERMAN

Type: Local

Description: WebSphere MQ Default Local Que

Put Messages: Allowed

Get Messages: Allowed

Default Priority: 0

Default Persistence: Not Persistent

Scope: Queue Manager

Usage: Transmission

Buttons: OK, Cancel, Apply, Help

## Section

# *WDI Client Profiles*



## WDI Client Profiles

- Queue Profile
- Service Profile
- Mailbox Profile
- Trading Partner Profile
- Network Profile

The definition of the destination from which data is received or to which it is written is defined with a series of administrative profiles. The Mailbox profile defines the network preferred by a requester during a Receive or Input process. The Trading Partner Profile defines the network preferred by the TP during a Send or Output process. The Network Profile defines the Network to be used and the programs for communicating with the Network. The Queue Profile defines the WebSphere WMQ Queue to be used. A Service profile contains a WebSphere Data Interchange PERFORM command. The Service profile constrains the conditions for executing the command, and it identifies the system names of the files used during processing of that command. Any number of logical files may be defined for a Service profile using data reference associations.

## WDI Client Profiles

### ▪ Queue Profiles

- ▶ The WMQ Queue profile associates a logical name with a physical WebSphere MQ message queue.

### ▪ Installed WDI Client

- ▶ ADF\_IN - Application data queue for WDI translation
- ▶ EDI\_IN - EDI data queue for WDI translation
- ▶ XML\_IN - XML data queue for WDI translation
- ▶ ADF\_OUT - Application data queue from WDI translation
- ▶ EDI\_OUT - EDI data queue from WDI translation
- ▶ XML\_OUT - XML data queue from WDI translation Service Profile



WebSphere Data Interchange can use a WebSphere MQ message queue for most of its input and output files. To use a WebSphere MQ message queue with WebSphere Data Interchange, you must first define the queue to WebSphere MQ and then identify it to WebSphere Data Interchange. Identifying a message queue to WebSphere Data Interchange is accomplished through a Queue profile.

# WDI Client Profiles

The screenshot displays the 'WebSphere Data Interchange for Multiplatforms V3.3 - WDI33Server (Adapters) - Query: All' window. A blue arrow points to the 'Queue Profiles' tab in the 'WDI33Server (Adapters) - Query: All' sub-window. The 'Queue Profiles' tab is active, showing a table with 18 rows of mailbox profiles.

| Mailbox Name | Description | Network Profile | Account | User ID     | Lock | Updated Date and Time | Updated User ID |
|--------------|-------------|-----------------|---------|-------------|------|-----------------------|-----------------|
| ADF_IN       | Mailbox ... | ADF             |         |             | No   | 2/20/2007 8:37:52 AM  | awinters        |
| ADF_OUT      | Mailbox ... | ADF             | IBM1    | DDSTST.IREQ | No   | 2/23/2007 2:49:46 PM  | awinters        |
| CYCL2WDI     | Receive ... | CYCLONE         |         |             | No   | 2/20/2007 8:37:52 AM  | awinters        |
| DIEDIN       |             | IN_EDI          |         |             | No   | 3/9/2007 11:11:01 AM  | awinters        |
| DIEDIOUT     |             | IN_XML          |         |             | No   | 3/9/2007 11:11:01 AM  | awinters        |
| DIXMLIN      |             | IN_XML          |         |             | No   | 3/9/2007 11:11:01 AM  | awinters        |
| DIXMLOUT     |             | IN_EDI          |         |             | No   | 3/9/2007 11:11:01 AM  | awinters        |
| EDI_IN       | Mailbox ... | EDI             |         |             | No   | 2/23/2007 2:49:47 PM  | awinters        |
| EDI_OUT      | Mailbox ... | EDI             | IBM1    | DDSTST.IREQ | No   | 2/20/2007 8:37:52 AM  | awinters        |
| ISFT2WDI     | Receive ... | ISOFT           |         |             | No   | 2/20/2007 8:37:52 AM  | awinters        |
| TPI2WDI      | Receive ... | TPI             |         |             | No   | 2/20/2007 8:37:53 AM  | awinters        |
| WDI2CYCL     | Send ms...  | CYCLONE         |         |             | No   | 2/20/2007 8:37:53 AM  | awinters        |
| WDI2ISFT     | Send ms...  | ISOFT           |         |             | No   | 2/20/2007 8:37:53 AM  | awinters        |
| WDI2TPI      | Send ms...  | TPI             |         |             | No   | 2/20/2007 8:37:53 AM  | awinters        |
| WDI2WMQI     | Send ms...  | WMQI            |         |             | No   | 2/20/2007 8:37:53 AM  | awinters        |
| WMQI2WDI     | Receive ... | WMQI            |         |             | No   | 2/20/2007 8:37:53 AM  | awinters        |
| XML_IN       | Mailbox ... | XML             | IBM1    | DDSTST.IREQ | No   | 2/20/2007 8:37:53 AM  | awinters        |
| XML_OUT      | Mailbox ... | XML             | IBM1    | DDSTST.IREQ | No   | 2/20/2007 8:37:53 AM  | awinters        |

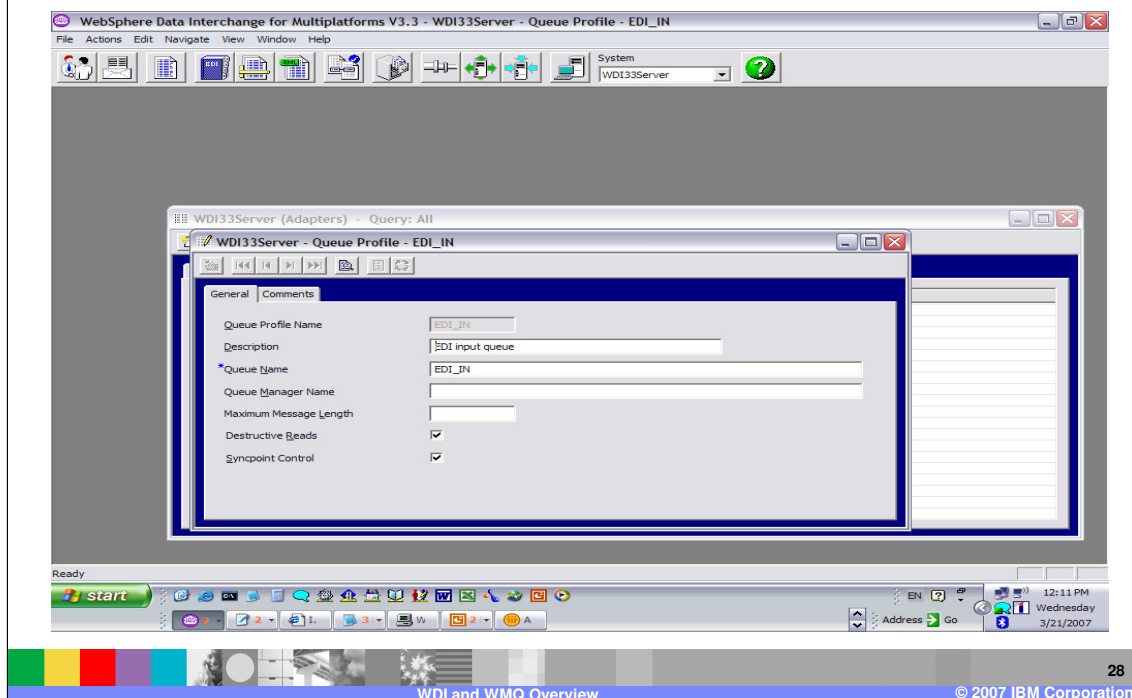
18 rows

start | EN | 12:05 PM | Wednesday 3/21/2007

WDI and WMQ Overview | © 2007 IBM Corporation

The Queue Profile, Mailbox Profile, and Network Profile are located in the WDI Client Adapters functional area.

## WDI Client Profiles



The Queue profile associates a logical name with a physical WebSphere MQ message queue. Message queue processing options are also identified in the Queue profile. There will at least one Queue profile for each WebSphere MQ message queue used by WebSphere Data Interchange. Additional Queue profiles can be defined for a single message queue when different processing options will be used for the same message queue.

## WDI Client Profiles

- Service Profiles
  - ▶ Used to chain commands together within WebSphere Data Interchange processing.
- Installed WDI Client
  - ADF\_IN
  - EDI\_IN
  - XML\_IN
  - ADF\_OUT
  - EDI\_OUT
  - XML\_OUT



A Service profile contains a WebSphere Data Interchange PERFORM command and it identifies the system names of the files used during processing of the command. It is used to chain commands together within WebSphere Data Interchange processing. Essentially, when WebSphere Data Interchange closes an output file, an attempt will be made to locate a Service profile that has the same name as the output file. If a Service profile is found, the PERFORM command in the Service profile will be executed. Typically, the output file that is triggering the search for a Service profile will be used as an input file for the PERFORM command contained in the Service profile.

# WDI Client Profiles

WebSphere Data Interchange for Multiplatforms V3.3 - WDI33Server (Processing) - Query: All

System: WDI33Server

WDI33Server (Processing) - Query: All

| Service Name | Description | Lock | Updated Date and Time | Updated User ID | PERFORM Command  |
|--------------|-------------|------|-----------------------|-----------------|------------------|
| ADF_IN       | Comman...   | No   | 2/20/2007 8:37:52 AM  | awinters        | PERFORM TRANS... |
| ADF_OUT      | Comman...   | No   | 2/23/2007 2:49:47 PM  | awinters        | PERFORM SENDP... |
| CYCL2WDI     | EDI mes...  | No   | 2/20/2007 8:37:52 AM  | awinters        | PERFORM TRANS... |
| DIEDIIN      | X12-EDI...  | No   | 3/9/2007 11:12:40 AM  | awinters        | PERFORM TRANS... |
| DIEDIOUT     | X12-EDI...  | No   | 3/9/2007 11:12:40 AM  | awinters        | PERFORM SEND ... |
| DIXMLIN      | XML for ... | No   | 3/9/2007 11:12:40 AM  | awinters        | PERFORM TRANS... |
| DIXMLOUT     | XML for ... | No   | 3/9/2007 11:12:40 AM  | awinters        | PERFORM SEND ... |
| EDI_IN       | Perform...  | No   | 2/23/2007 2:49:47 PM  | awinters        | PERFORM TRANS... |
| EDI_OUT      | Comman...   | No   | 2/20/2007 8:37:52 AM  | awinters        | PERFORM SEND ... |
| ISFT2WDI     | EDI mes...  | No   | 2/20/2007 8:37:52 AM  | awinters        | PERFORM TRANS... |
| TP12WDI      | EDI mes...  | No   | 2/20/2007 8:37:52 AM  | awinters        | PERFORM TRANS... |
| WMIQ12WDI    | Comman...   | No   | 2/20/2007 8:37:52 AM  | awinters        | PERFORM TRANS... |
| XML_IN       | Comman...   | No   | 2/20/2007 8:37:52 AM  | awinters        | PERFORM TRANS... |

13 rows

start

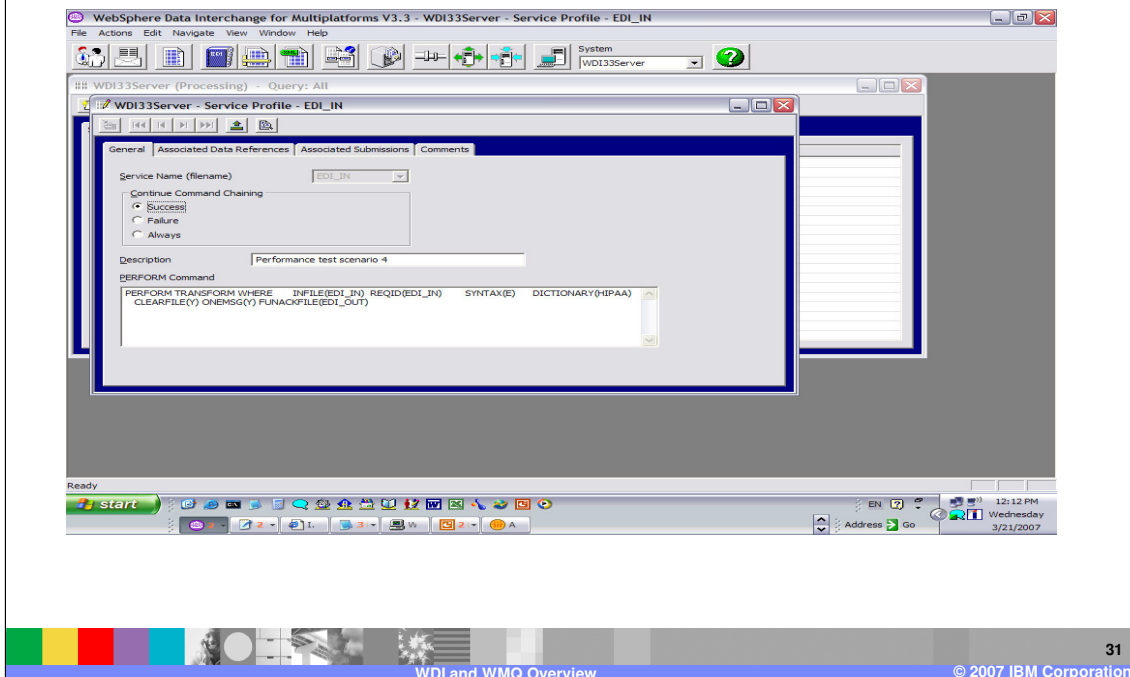
EN 12:07 PM  
Wednesday 3/21/2007

30

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The Service Profile is located in the WDI Client Processing functional area.

## WDI Client Profiles



A Service profile contains a WebSphere Data Interchange PERFORM command and it identifies the system names of the files used during processing of the command.

## WDI Client Profiles

WebSphere Data Interchange for Multiplatforms V3.3 - WDI33Server - Service Profile - EDI\_IN

File Actions Edit Navigate View Window Help

System WDI33Server

WDI33Server (Processing) - Query: All

WDI33Server - Service Profile - EDI\_IN

General Associated Data References Associated Submissions Comments

New... Open... View... Delete

| File Name | Description | Application Defaults Profile | Physical File Reference | Maximum Logical Record Length | Initial D |
|-----------|-------------|------------------------------|-------------------------|-------------------------------|-----------|
| ADF_IN    |             |                              |                         | 0                             | New       |
| ADF_OUT   |             |                              |                         | 0                             | New       |
| CTL_OUT   |             |                              |                         | 0                             | New       |
| EDI_OUT   |             |                              |                         | 0                             | New       |
| EXCFILE   |             |                              |                         | 0                             | New       |
| QRYFILE   |             |                              |                         | 0                             | New       |
| RPTFILE   |             |                              |                         | 0                             | New       |
| TRKFILE   |             |                              |                         | 0                             | New       |
| WRKFILE   |             |                              |                         | 0                             | New       |
| XML_IN    |             |                              |                         | 0                             | New       |
| XML_OUT   |             |                              |                         | 0                             | New       |

Ready

start

EN 12:23 PM Wednesday 3/21/2007

Address Go

32

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WebSphere Data Interchange uses Associated Data Reference Profiles to define files used in the Service profile. Associated Data references define the logical-to-physical file relationships, and include common files, input files, output files, network files, and export and import files. Associated Data references are only used to supply file information that is not otherwise provided.



## WDI Client Profiles

### ▪ Mailbox Profile

- ▶ A Mailbox profile describes the individual users or groups who request network services for sending or receiving documents, EDI transactions, messages, or files on a WebSphere Data Interchange System.

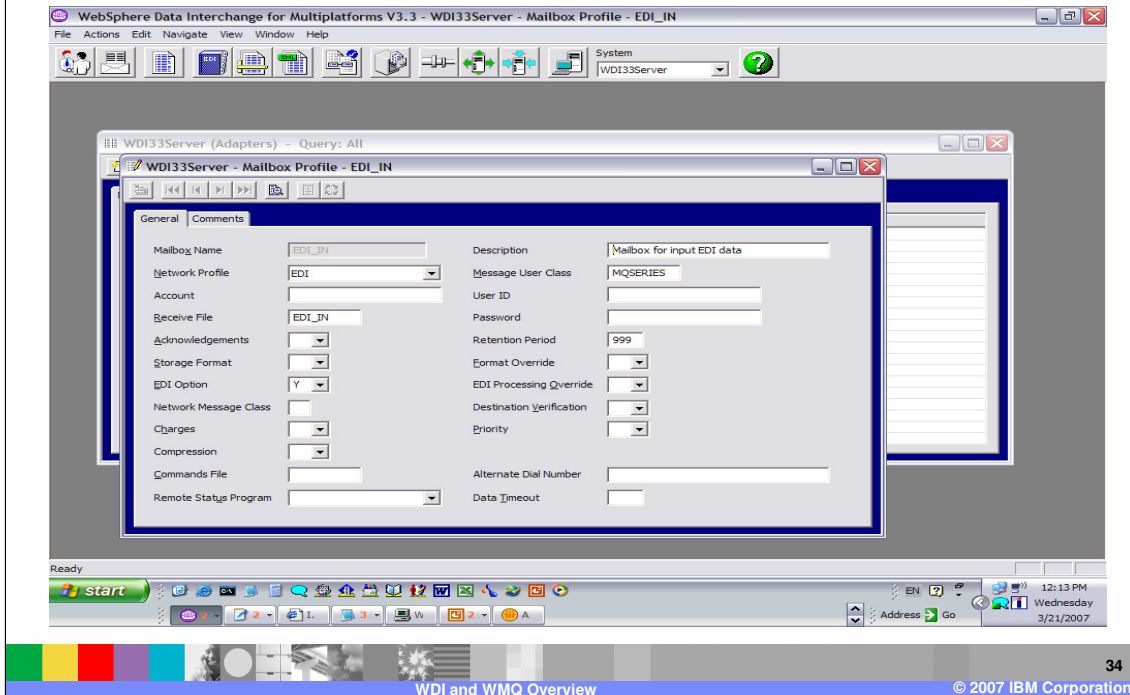
### ▪ Installed Client

- ADF\_IN
- EDI\_IN
- XML\_IN
- ADF\_OUT
- EDI\_OUT
- XML\_OUT



A **Mailbox profile** describes the individual users or groups who request network services for sending or receiving documents, EDI transactions, messages, or files on a WebSphere Data Interchange System. A Mailbox profile is similar to a network mailbox owner. You must identify each user or group who will request network services by adding a Mailbox profile to WebSphere Data Interchange for that user or group. Although multiple users or groups can use the same network mailbox, you must still identify each user or group with a Mailbox profile. Each Mailbox profile allows for specific processing options for the user or group it represents.

## WDI Client Profiles



The Mailbox Editor shows the details of a Mailbox profile. Most information contained in the profile is displayed on the General tab page. Additional comments about the profile can be put in a comment on the Comments tab page.

## WDI Client Profiles

### ▪ Network Profile

- ▶ A Network profile is used to define the characteristics of a network you use for communications with trading partners. It provides options and parameters used when communicating with the network. A Network profile may also be used to identify the WMQ Queue profiles used when sending or receiving documents from a trading partner.

### ▪ Installed Client

- ADF
- EDI
- XML



A Network profile is used to define the characteristics of a network you use for communications with trading partners. It provides options and parameters used when communicating with the network. For WebSphere MQ communication with trading partners, the Network profile identifies the Queue profiles associated with the message queues used to send and receive documents. To send data to a trading partner, specify the Network profile that identifies the appropriate Queue profile in the Network ID field of the Trading Partner profile. To receive data from a trading partner, specify the Network profile that identifies the appropriate Queue profile in the Network ID field of the Mailbox profile.

## WDI Client Profiles

WebSphere Data Interchange for Multiplatforms V3.3 - WDI33Server (Adapters) - Query: All

File Actions View Window Help

System | WDI33Server

WDI33Server (Adapters) - Query: All

Mailboxes Network Profiles Network Commands Network Security Queue Profiles Continuous Receive

| Network ID | Description | Network Name   | Communication Routine | Lock | Updated Date and Time | Updated User ID |
|------------|-------------|----------------|-----------------------|------|-----------------------|-----------------|
| ADF        | Network...  | MQSeries       | VANIMQ                | No   | 2/23/2007 2:49:46 PM  | awinters        |
| CYCLONE    | Network...  | MQSeries       | VANIMQ                | No   | 2/20/2007 8:37:53 AM  | awinters        |
| EDI        | Network...  | MQSeries       | VANIMQ                | No   | 2/23/2007 2:49:46 PM  | awinters        |
| GEIS       | Network...  | GE Informat... | GEISVAN               | No   | 2/20/2007 8:37:53 AM  | awinters        |
| IEDAZZA    | Network...  | demo850cls...  | VANIMQ                | No   | 2/1/2007 4:53:32 PM   | awinters        |
| IEDJH4H    | Network...  | demo850cls...  | VANIMQ                | No   | 2/1/2007 4:53:32 PM   | awinters        |
| IINAX      | Network...  | IBM Inform...  | VANINB1               | No   | 2/20/2007 8:37:53 AM  | awinters        |
| IINB42     | Network...  | IBM Inform...  | VANINB1               | No   | 2/7/2007 12:46:00 PM  | awinters        |
| IINWJN     | Network...  | IBM Inform...  | VANINB1               | No   | 2/20/2007 8:37:53 AM  | awinters        |
| IN_ED1     | Network...  | VANIMQ         | VANIMQ                | No   | 3/9/2007 11:11:01 AM  | awinters        |
| IN_XML     | Network...  | VANIMQ         | VANIMQ                | No   | 3/9/2007 11:11:01 AM  | awinters        |
| ISOFT      | Network...  | WMQ w/WD...    | VANIMQ                | No   | 2/20/2007 8:37:53 AM  | awinters        |
| JCH4H      | Network...  | demo850cl...   | VANIMQ                | No   | 2/1/2007 4:53:32 PM   | awinters        |
| MQSAMP     | Sample ...  | MQSeries       | VANIMQ                | No   | 2/20/2007 8:37:53 AM  | awinters        |
| TPI        | Network...  | WMQ w/TPI...   | VANIMQ                | No   | 2/20/2007 8:37:53 AM  | awinters        |
| WMQI       | Network...  | WMQ w/RFH2     | VANIMQ                | No   | 2/20/2007 8:37:53 AM  | awinters        |
| XML        | Network...  | MQSeries       | VANIMQ                | No   | 2/20/2007 8:37:53 AM  | awinters        |

17 rows

start

EN 12:14 PM Wednesday 3/21/2007

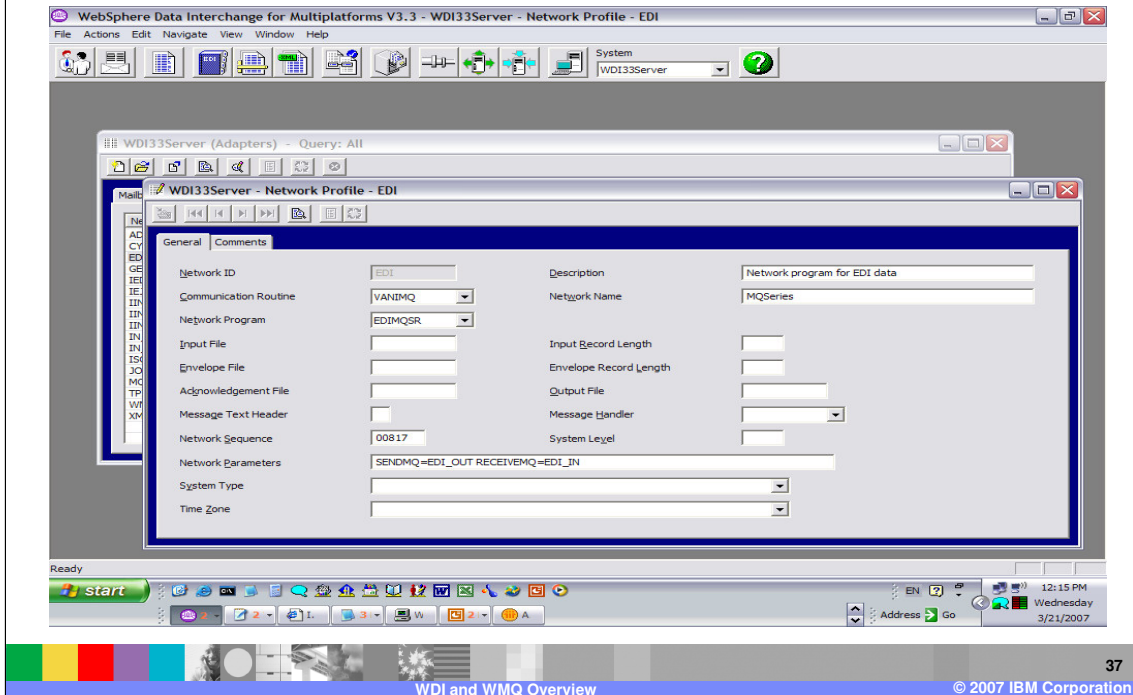
Address Go

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WDI and WMQ Overview © 2007 IBM Corporation

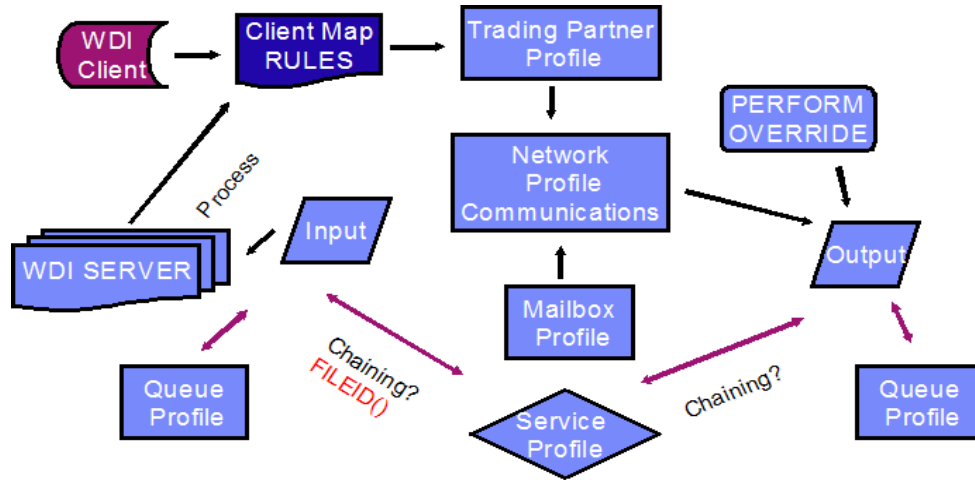
WebSphere Data Interchange includes support for multiple networks and allows you to write programs to add support for any network that is not supported. WebSphere Data Interchange uses Network profiles to define the network and Network Commands profiles to define the operations supported by that network.

## WDI Client Profiles

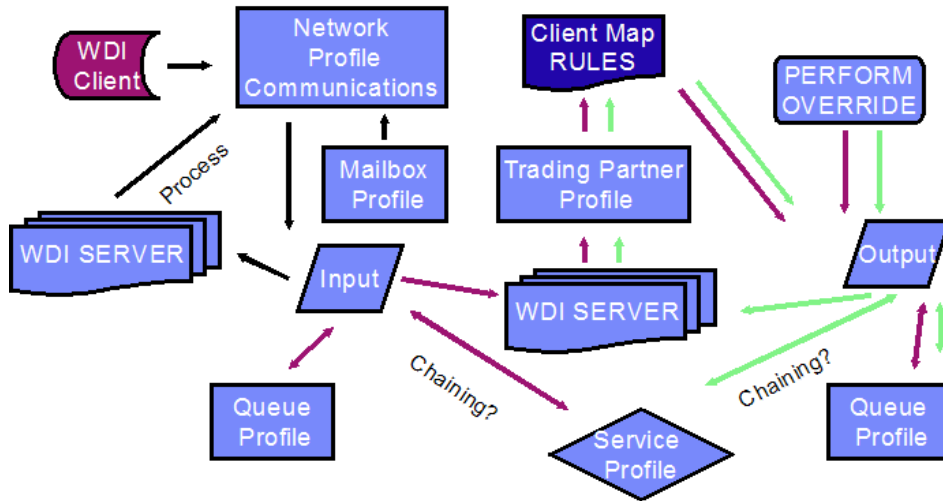


The Network Profile Editor shows the details of a Network profile. The editor contains two tab pages; General and Comments. Most information contained in the profile is displayed on the General tab page. Additional comments about the profile can be put in a comment on the Comments tab page.

# WDI Client Profiles Relationships - Outbound



# WDI Client Profiles Relationships - Inbound



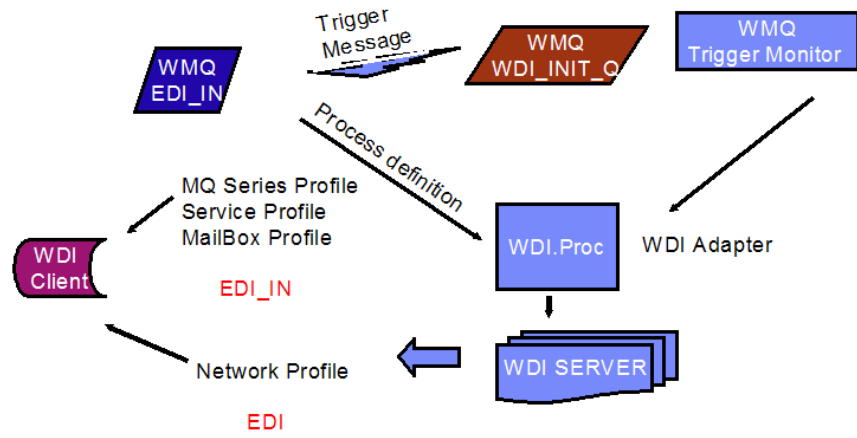
# WMQ and WDI

The screenshot shows the IBM WebSphere MQ console interface. A table lists various queues, and a dialog box titled 'EDI\_IN Properties' is open, displaying configuration details for the 'EDI\_IN' queue. The 'Triggering' tab is active, showing the following settings:

| Property                 | Value      |
|--------------------------|------------|
| Trigger Control          | On         |
| Trigger Type             | First      |
| Trigger Depth            | 1          |
| Trigger Message Priority | 0          |
| Trigger Data             |            |
| Initiation Queue Name    | WDI.INIT.Q |
| Process Name             | WDI.PROC   |



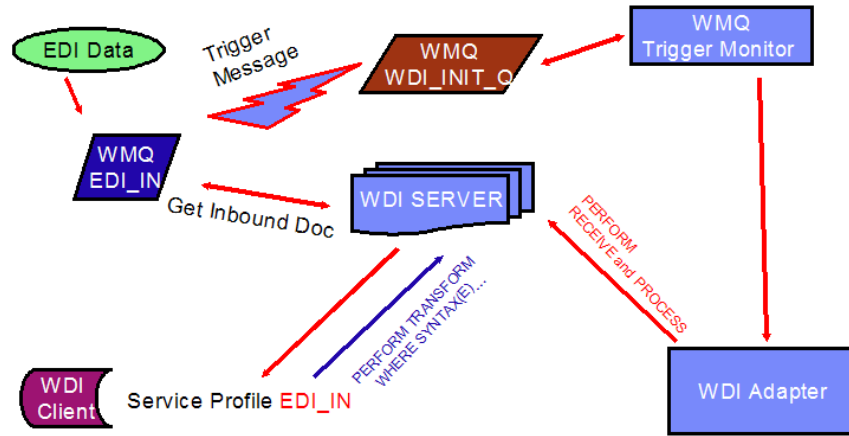
# WMQ and WDI



## WMQ Trigger Monitor

- If the Trigger Monitor is to execute on an AIX system then the Set-User-ID Mode needs to be disabled for the WMQ program runmqtrm. Do the following steps:
  - ▶ Logon with root authority
  - ▶ `chmod -s /usr/mqm/bin/runmqtrm`
  
- To start the trigger monitor:
  - ▶ Change the current directory to the WDI bin directory.
  - ▶ run the following from the command prompt
  - ▶ `runmqtrm -q WDI.INIT.Q ---` to stop CtrlC
  
- if the default queue manager is not used then the queue manager name must be provided
  - ▶ `runmqtrm -m qmgrname -q WDI.INIT.Q`

# WMQ and WDI



## Section

# *Command Chaining*

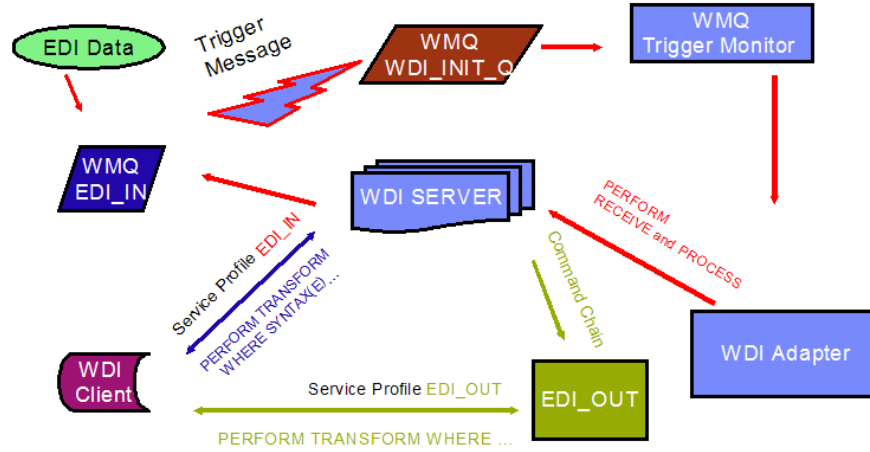
## WDI Command Chaining

- Command chaining allows the output of one command to be chained to a second command.
- Service profiles are used to identify the sequence of the commands.
- The chain is terminated when no Service profile exists, no output file is created, or the return code of a command indicates an error.
- Command chaining may continue specifically for an error condition.



Command chaining allows the output of one command to be chained to a second command. This allows for techniques such as double translation, required to go from XML->EDI with the Send/Receive translator, or combination commands with the PERFORM TRANSFORM to couple transmission with a translation, which is a TRANSFORM followed by a SEND command. Service profiles are used to identify the sequence of the commands. The key for the chain is the logical name of the output file. The chain is terminated when no Service profile exists, no output file is created, or the return code of a command indicates an error.

# WMQ and WDI



## Section

# *MCD Profile*

## WDI Client - MCD Profile

- WebSphere Data Interchange can also exchange documents with applications via message queues or JMS.
- The MQRFH2 header contains a Message Content Descriptor (<mcd>) folder. The Message Content Descriptor contains a set of values that identify the meta-data name associated with the document.
- An MCD profile is used to associate the name of a WebSphere Data Interchange document definition with the values contained in the Message Content Descriptor (mcd) of the MQRFH2 header.
- The name of a WebSphere Data Interchange document definition will occur in an MCD profile along with the corresponding values from the Message Content Descriptor of the MQRFH2 header..



In addition to WebSphere Data Interchange's normal support for WebSphere MQ message queues, WebSphere Data Interchange can exchange documents with applications via message queues or JMS when the message containing the document is prefixed with the MQRFH2 header. Some applications, such as WebSphere Message Broker and WebSphere Interchange Control Server (WICS), use these mechanisms to exchange documents with WebSphere Data Interchange. The MQRFH2 header contains a Message Content Descriptor (<mcd>) folder. The Message Content Descriptor contains a set of values that identify the meta-data name associated with the document.

When exchanging documents where the MQRFH2 header is involved, an MCD profile is used to associate the name of a WebSphere Data Interchange document definition with the values contained in the Message Content Descriptor (mcd) of the MQRFH2 header. Document definitions in WebSphere Data Interchange include Data Formats, EDI Standard Transactions, XML schemas and XML DTDs. The MCD profile allows WebSphere Data Interchange to receive a document with an MQRFH2 header associate it with an existing document definition in WebSphere Data Interchange. The name of a WebSphere Data Interchange document definition will occur in an MCD profile along with the corresponding values from the Message Content Descriptor of the MQRFH2 header..



## WDI Client - MCD Profile

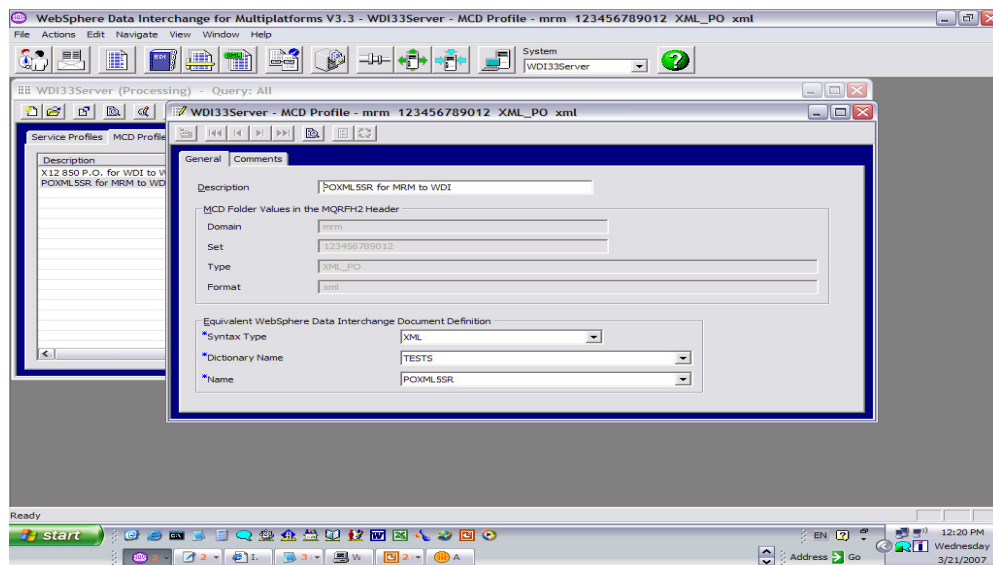
- Outbound
  - ▶ Network Profile with network name EDIRFH2 triggers lookup for MCD Profile matching on Syntax, Dictionary, Document, to create the WMQ MQMD and MQRFH2 headers in the output file.
  - ▶ Network Profile with network name EDICYCL creates WMQ header with extra fields for interfacing with CYCLONE.
  - ▶ If MCD profile NOTFOUND
    - domain = 'wdi'
    - dictionary, document = from map executed.
- Inbound
  - ▶ WMQ headers are parsed and triggers lookup for MCD Profile match.
  - ▶ Syntax, Dictionary, Document, values defined in MCD Profile are used for **substitution** values on Service Profile PERFORM command.
- WMQ user folder may also be accessed: For example: add element COMMAND and use substitution on Service Profile &COMMAND.



With Outbound processing, a Network Profile with network name EDIRFH2 triggers lookup for MCD Profile matching on Syntax, Dictionary, Document, to create the WMQ MQMD and MQRFH2 headers in the output file. Network Profile with network name EDICYCL creates WMQ header with extra fields for interfacing with CYCLONE. If an MCD profile is not found, the domain is 'wdi' and the dictionary and document are taken from the map executed.

Inbound - WMQ headers are parsed and triggers lookup for MCD Profile match. Syntax, Dictionary, Document, values defined in MCD Profile are used for **substitution** values on Service Profile PERFORM command.

## WDI Client - MCD Profile



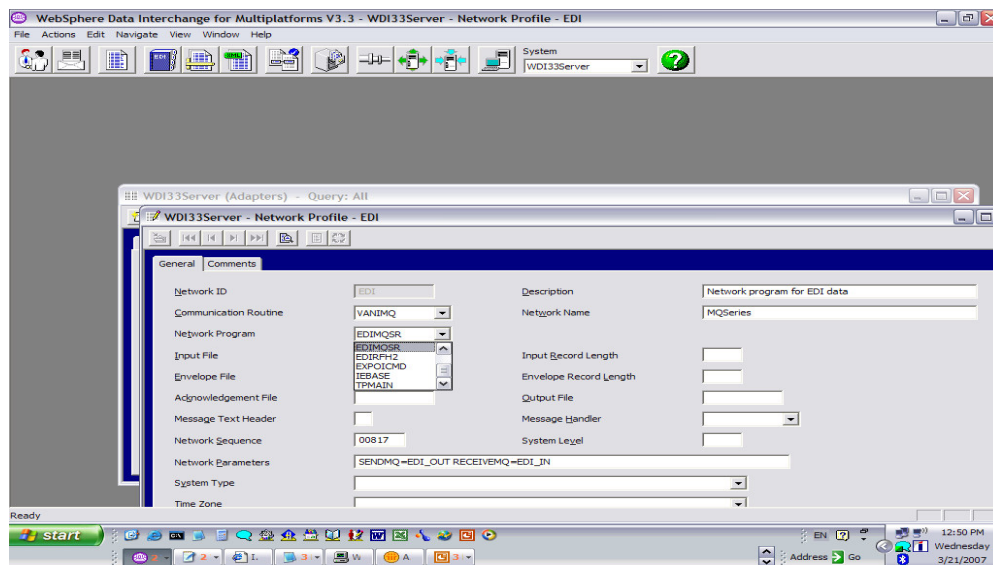
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WDI and WMQ Overview

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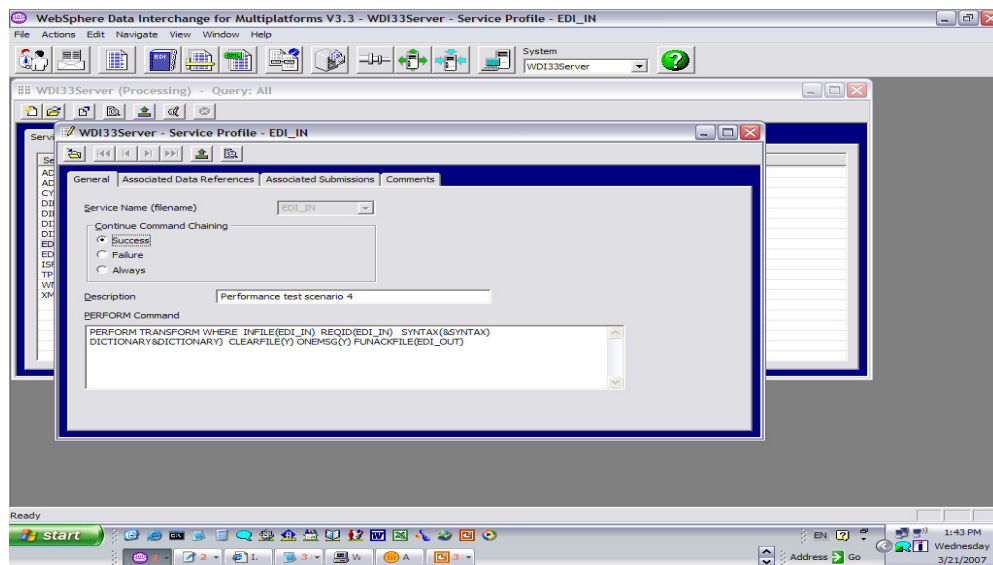
MCD profiles can be added, viewed and changed using the MCD Profile Editor. The editor contains two tab pages; General and Comments. Most information contained in the profile is displayed on the General tab page. Additional comments about the profile can be put in a comment on the Comments tab page.

## WDI Client - MCD Profile



In the Network profile, the Network Program is the physical name of the network program that sends and receives documents, messages, and files. This is the program invoked by the communication routine to process requests.

## WDI Client - MCD Profile



Substitution keywords can be used within the PERFORM command. The values from the WMQ user folder are accessed and used for the substitution keyword values.

## Section

# *WDI Mapping properties*

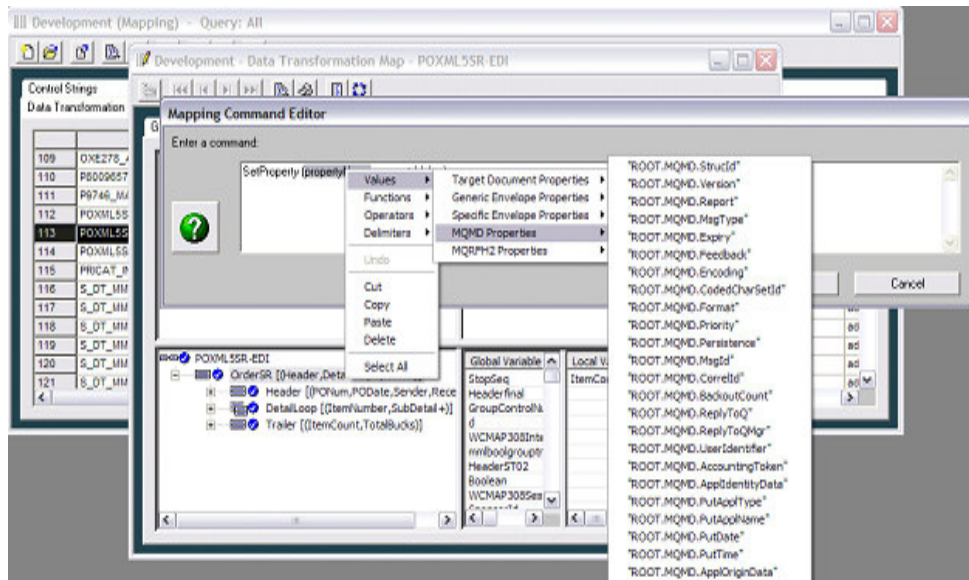
## WDI Client - MCD Profile

- MQMD and MQRFH2 mapping properties
- GetProperty() function.
- SetProperty() command.



You can get and set the values of the MQMD and MQRFH2 headers used by WebSphere MQ. By allowing you to access the values in these MQ headers from your maps, WebSphere Data Interchange can be more easily integrated with other WebSphere MQ and JMS applications. The WebSphere MQ header values from the source document can now be obtained using the GetProperty() function. The header values on the target document can now be set using the SetProperty() command.

## WDI Client - MCD Profile



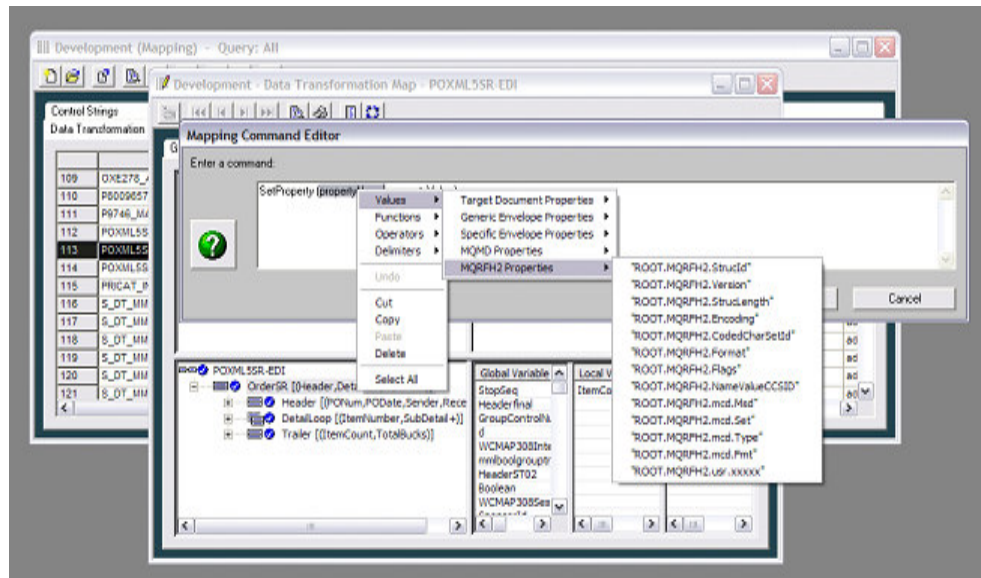
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WDI and WMC Overview

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This is a list of the MQMD properties available.

## WDI Client - MCD Profile



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WDI and WMC Overview

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This is a list of the MQRFH2 properties available.



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