

OMEGAMON XE for Messaging

Comprehensive Workspace Sample Using Navigator Views

IBM Software Group

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1 Preface

1.1 Purpose

This solution presents ITM V6.x enhanced comprehensive workspaces in a custom navigator view for OMEGAMON XE for Messaging V7.

OMEGAMON XE for Messaging V7 delivers a lot of useful workspaces with very detailed information on a single WebSphere MQ server. This solution presents a complete new approach to navigate to the details of a single MQ resources. The inspection of single objects is more context driven and spans WebSphere MQ server bounds.

The structure of the new navigator is inherited from the original product, so that the user will feel comfortable with the solution. When installed, situations are associated to the new navigation tree.

This solution should highlight the capabilities of the ITM V6 infrastructure and the power of using ITM navigator views in a production environment to identify potential upcoming problems in WebSphere MQ infrastructures.

The linking capability enables the users to follow the path of the message flows across system borders and get a more comprehensive view of the entire object chain making up the communication path in WebSphere MQ. It enables users to quickly identify the root cause of message flow problems.

1.2 The Author

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2 Conventions

• Queries:

All used queries in the workspaces under the new navigator have been self-defined (inherited from the product provided queries)

The queries have the prefix DW.

Navigator name:

The navigator name starts with the prefix DWMQ

Navigator item names

All navigator item names start with the prefix DWMQ

- Workspace names
 All workspace names start with the prefix DWMQ
- Link names
 All defined links have the prefix DWMQ in their names.



3 The Navigator DWMQ WebSphere MQ

The standard MQ monitoring navigator in OMEGAMON XE for Messaging V7 lacks the ability to display information across WebSphere MQ queue manager boundaries. This is because one agent for OMEGAMON XE for Messaging can only monitor the queue manager it is dedicated to. The IBM Tivoli Monitoring (ITM) infrastructure enables users to cross these boundaries by creating Logical Views.

Since Version 6.2.1 of ITM a new feature enables users to export and import navigators from ITM and to share these navigators across ITM infrastructures. This new feature is used, to share the on hand WebSphere MQ solution.

The new navigator is inherited from the original WebSphere MQ navigator sub-tree known from the Physical View in ITM.



Illustration 1: Navigator Setup

Almost all navigator items from the *Physical View* are also available in the new created *DWMQ WebSphere MQ Summary* navigator.

While on the left side only one managed system (here: queue manager MQWS01_1) is reporting data, on the right side, all connected managed system of type WebSphere MQ are reporting.





Illustration 2: Managed system assignment change

The managed system list "*MVS_MQM" represents all agents (and its instances from z/OS) reporting to the actual ITM infrastructure.

To limit the number of reporting agents, exchange the managed system list assignment, using your own management system list. Details about creating and managing system list may be found in the <u>ITM User's Guide</u>.

Warning:

In large enterprises, the *MVS_MQM Managed Systems List may contain many MQ systems. If the number of managed systems is large you will encounter performance problems. When using this solution, create your own Managed Systems Lists and assign a limited number of MQ managed systems to each Managed Systems List.

We recommend that you perform load testing in your environment prior to putting the solution into production. This will allow you to build Managed Systems Lists with the appropriate number of managed systems while achieving the performance characteristics you desire.

The new assignment of managed systems enables now a comprehensive view on your entire MQ environment.



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🛄 Queue Manager Stat	us Overview							,											/ ₹	088×
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MQWS01_1::MQ	MQW501_1	dw-vmwas01			08/14/09	10:25:00	Active	Linux	1	1024	1 44	34	2	1	4	34	0	0	30	1
MQWS01_2::MQ	MQW501_2	dw-vmwas01	-		08/14/09	10:25:00	Active	Linux	1	1024	46	35	3	1	4	35	0	0	32	1
MOWS02_1MQ	MOW502_1	dw-vmwas02			08/14/09	10:24:00	Active	Linux	0	1024	4 43	33	3	1	4	33	0	0	28	0
MQWSCL01::MQ	MQWSCL01	dw-vmwas01			08/14/09	10:25:00	Active	Linux	0	1024	1 39	30	1	1	1	30	0	0	26	0
MQWSCL02::MQ	MQWSCL02	dw-vmwas02			08/14/09	10:24:00	Active	Linux	0	1024	4 40	31	1	1	1	31	0	0	26	0
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Illustration 3: The new view to WebSphere MQ



4 The Navigator Items and Workspaces

4.1 Navigator Item DWMQ WebSphere MQ Summary

This is the root item of the new navigator. It has only one workspace attached, having the same name.

📱 DW WebSphere MQ Summary - dw-vmltm01.home - itmuser - Administrator *ADMIN MODE* 📃 🗐 🗴																			
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C DWMQ WebSphere M 😪 Physical	Q Summary		4															×	
🛄 Queue Manager Status Overview																	/ ‡	×	
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MQWS01_2::MQ MQWS01_	2 dw-vmwas01			08/14/09 10:25:00	Active	Linux	1	1024	46	35	3	1	4	35	0	0	32	1	
MQWS02_1::MQ MQWS02_	L dw-vmwas02			08/14/09 10:24:00	Active	Linux	0	1024	43	22		1	4		0	0	28	0	
MQWS02_2MQ MQWS02_	dw-vmwas02			08/14/09 10:24:00	Active	Linux	0	1024	43	30	3	1	4	30	0	0	28	0	
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Illustration 4: Workspace DWMQ WebSphere MQ Summary

It has two table views:

• Situation Event Console

In the upper right frame the currently active situations are displayed. This Situation Event Console shows only situations active in the navigation tree displayed on the left site.

Queue Manager Status Overview

In the lower area the status of all reporting queue managers is shown. The following links have been defined:

- DWMQ Queue Manager Parameters
 DWMQ Listener Status
 DWMQ Dead Letter Queue Status for QMgr ...
 DWMQ Error Log Summary for QMgr ...
 DWMQ Queue Statistics Summary for QMgr ...
 DWMQ Queue Definitions Summary for QMgr ...
 DWMQ Channel Performance Summary for QMgr ...
 DWMQ Channel Definitions Summary for QMgr ...
- DWMQ MQSeries Events Summary for QMgr ...
- 🐵 DWMQ Linux OS System

Illustration 5: Links for queue managers



• DWMQ Queue Manager Parameters

This link will guide to the selected queue manager's parameters on workspace <u>DWMQ</u> <u>Queue Manager Parameters</u>

• DWMQ Listener Status

Direct link to the workspace <u>DWMQ Queue Manager Listener Status</u>, limiting the output of listener status information to the selected queue manager

• DWMQ Dead Letter Queue Status for QMgr ...

Displays the Dead-Letter queue status summary for the selected queue manager using the workspace <u>DWMQ Dead Letter Queue Status Summary</u>

• DWMQ Error Log Summary for QMgr ...

Link to the workspace <u>DWMQ Error Log Summary</u>, limiting the output to the selected queue manager context.

• DWMQ Queue Statistics Summary for QMgr ...

Link to the workspace <u>DWMQ Queue Statistics Summary</u>, limiting the output to the selected queue manager context.

• DWMQ Queue Definition Summary for QMgr ...

Link to the workspace <u>DWMQ Queue Definition Summary</u>, limiting the output to the selected queue manager context.

• DWMQ Channel Performance Summary for QMgr ...

Link to the workspace <u>DWMQ Channel Performance Summary</u>, limiting the output to the selected queue manager context.

• DWMQ Channel Definition Summary for QMgr ...

Link to the workspace <u>DWMQ Channel Definition Summary</u>, limiting the output to the selected queue manager context.

• DWMQ MQSeries Event Summary for QMgr ...

Link to the workspace <u>DWMQ MQSeries Event Summary</u>, limiting the output to the selected queue manager context.

• DWMQ Linux OS Agent

Link to the root navigator item of the Linux OS agent in the Physical ITM navigator for the hosting system.

The following thresholds apply to the table:





4.2 Navigator Item DWMQ Channel Definition Summary

This Navigator Item has two workspaces.

🚰 DWMQ Webs	Sphere MQ	Summary		@ MQWS01_1::MQ M	Q
— 🖪 DWMQ C	hanne	nition Cummon		MOW501 2 MO M	0
- 📲 DWMQ C	hanne	Workspace	•	🗷 🔚 DWMQ Channel Definition Summary	
— 📲 DWMQ C	luster	Take Action		🗆 🔚 DWMQ Channel Definition Detail	
Illustration 6: /	Available I	workspaces			

The default workspace is the one with same name as the navigator item. The other one is for displaying channel definition details.

4.2.1 Workspace DWMQ Channel Definition Summary

This workspace displays an overview of all channel definitions in the reporting WebSphere MQ environment.

📱 DWMQ Channel Definition Summary - dw-vmitm01.home - itmuser - Administrator *ADMIN MODE* 📃 🗖 🗙													X		
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8	💈 View: DWMQ V	WebSphere MQ Summary	A		Origin	Node	▲ QMgr Name	Host Name	Current Channel	Inactive Channel	Current Receiver	s Inactive Receivers	Current Senders	Inactive Senders	C Rei
19	DWMQ WebSphere N	4Q Summary			MQWS01	_1::MQ	MQWS01_1	dw-vmwas01		1	?	0 7	1	5	
	📲 DWMQ Channel [Definition Summary			MQWS01	_2::MQ	MQW501_2	dw-vmwas01		2 10	5	1 6	1	5	
	DWMQ Channel F	Performance Summary			MQWS02	_1::MQ	MQW502_1	dw-vmwas02		! 14	1	1 5	1	4	
	DWMO Cluster O	ueue Manager Summary			MQWS02	_2::MQ	MQW502_2	dw-vmwas02		1	1	1 5	1	4	
	📕 DWMQ Claster Q	tter Queue Messages Summary			MQWSCL	01::MQ	MQWSCL01	dw-vmwas01	-) 17	2	0 4	0	3	
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	🚰 DWMQ Error Log	Summary													
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₩	MOWSOI 1MQ	MOWS01_1.MOWS01_2	RCVP				uw-vmwas01.r	ome(1415)	TCP	50 415	4204 10	Receiver	Channel ITU	in MQWSU	
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6	MOWS01 1MQ	MOWS01 2 MOWS01 1	RCVR				G	0	TCP	50 414	4304 Ye	Bereiver	Channel Fr	nm MOW	ŝ
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60	MOW502_1::MO	MOWS01_2.MOWS02_1	RCVR						TCP	50 419	4304 Ye	Receiver	Channel Fi	rom MOW	5
(1)	MQWS01_2::MO	MQWS01_2.MQWS02_1	SDR				dw-vmwas02.h	ome(1414)	TCP	50 419	4304 Ye	Sender Cl	nannel fro	m MQWS0	1
	MQWS02_2::MO	MQWS01_2.MQWS02_2	RCVR						TCP	50 419	4304 Ye	Receiver	Channel Fi	rom MQW	5
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Illustration 7: The workspace DWMQ Channel Definition Summary

The workspace consists of two table views:

Reporting Queue Managers

This table displays the channel summary overview from the queue manager perspective. The list of the queue manager indicates the number of potential reporters for the second table (see below).



▦	Rep	porting Queue Man	agers			
		Origin Node	▲ QMgr Name		Host Name	
~		UOWEA1 1	MOWERS A	also.	-vmwas01	
	œ	DWMQ Limit To C)ueue Manager		-vmwas01	
					-vmwas02	
	¢	Link Wizard			-vmwas02	
	æ	Link Anchor			-vmwas01	
		ind in a constrained	ing indexe	-	-vmwas02	

By using the provided context sensitive link on one of the table lines you can limit the output in the second table ("Channel Definitions").

Channel Definitions

•

In this table all channel definition abstracts in the entire MQ network are displayed (except a limitation has been set, by using one of the provided links – from this workspace or from another workspace). To get more details about one specific link, please use the provided link "DWMQ Channel Details".

ĺ	🛄 a	hannel Definitions			
		Origin Node	▲ Channel Name	Channel Type	0
I		MQW501_2::MQ	MQWS01_1.MQWS01_2	RCVR	Г
I		MOWE01 1-MO	MOW501_1.MQW501_2	SDR	
I	(DWMQ Channel [Details _1.MQWS02_1	RCVR	
I			_1.MQW502_1	SDR	Γ

The following thresholds have been defined to the table view:





4.2.2 Workspace DWMQ Channel Definition Details

This workspace should only be used as a target link from another workspace.

Warning:

Navigating to this workspace directly, without required context information (Channel Name and Queue Manager Name) will lead to extensive CPU and network usage on the WebSphere MQ hosting system as well as on the entire ITM infrastructure, because definition details for all channels in the entire WebSphere MQ scope will be gathered, transferred and displayed.

Below there is an example of that workspace, displaying detailed information for a sender channel.

📱 DWMQ Channel Definition Detail - dw-vmitm01.home - itmuser - Administrator *ADMIN MODE*													
File Edit View Help													
		2	. AN 1 🖽 .		🗛 📖 🗔	1	ह्य 🥅 🧀 :ल वि	- 🗖 8 = 2 🔿 🔿					
	••	15 1	u v 0∥ ⊞ .	V 💷 🗠 🔼			<u>m</u> 🛩 💇 🗆 🖬						
📲 Navigator 🌲 🗉 🖯	×	🛄 Cha	nnel Paramete	er 5				13					
🖉 🏀 View: DWMQ WebSphere MQ Summary 💌	8		Parameter Name	Para Desci	neter ription			Parameter Value	Para T\				
📲 DWMQ WebSphere MQ Summary		69 1	HANNEL	Channel name			MQWS01_1.MQWS	01_2	A				
🚽 🗕 📲 DWMQ Channel Definition Summary		60 1	THLTYPE	Channel type			SDR		QMCH_DEF.				
- 🚇 DWMO Channel Performance Summary		60 1	IONNAME	Connection nam	9		dw-vmwas01.hor	ne(1415)					
DWMO Cluster Queue Manager Summany		69	FRPTYPE	Transport type			ТСР		QMCH_DEF.				
		69	DESCR	Description			Sender Channel fr	om MQW501_1 To MQW501_2					
🗌 🦳 🎬 DWMQ Dead-Letter Queue Messages Summary		60	BATCHSZ	Max msgs for ch	eckpoint		50						
🛛 — 🕰 DWMQ Error Log Summary		60	MAXMSGL	Maximum messa	age length		4194304						
🛛 🗕 📲 DWMQ MQSeries Events Summary		()	(MITQ	Transmission qu	eue name		MQWS01_2						
DWMO Queue Definitions Summany		60 1	ONVERT	Sending MCA co	nvert data		No		QMCH_DEF.				
Dwing Queue Deminions Summary		60	DISCINT	Max xmitq msg	wait in s.		6000						
🗌 — 📑 DWMQ Queue Manager Status Summary		60	ONGRTY	Max long retry a	ttempts		9999999999						
🛛 🛏 🚰 DWMQ Queue Statistics Summary		60	ONGTMR	Long retry wait i	n s.		1200						
		60	1CANAME	Message channe	l agent								
		60	ICATYPE	MCA program ty	pe		Process	QMCH_DEF.					
		60	MCAUSER MCA user identifier										
		60	IODENAME	LU 6.2 mode na	me								
			ISGDATA	Message exit us	er data								
			ASGEXII	Message exit na	me								
		PASSWORD MCA SNA session password											
				Receive exit use	r data								
				Receive exit han	1e								
				Security exit use	r data								
		00 2		Security exit han	18								
				Send exit user o	ala								
				Send exit name			00000000						
				Max chart rates	er wrap		10						
				Max short retry	attempts		10						
				Transaction pro-	II S.		00						
		00	ISERID	Task user identi	fior								
		(10)	BATCHINT	Batch interval in	me		0		-				
Physical 🐗 DWMQ WebSphere MQ Summary	Ľ			i baten intervarin	1115.		Č. L.		Þ				
E Channel Definitions								13					
Origin Node Channel A Channel Clu	uster 0	Cluster	Co	nnection	Transport	Batch	Maximum Cur	C	hannel				
Type Name Name Name Type Size msglen Dem Description Description													
	_												
🕒 Hub Time: Sat, 08/15/2009 06:28 PM 💽 Ser	ver Avai	ilable	DWM	1Q Channel Defin	tion Detail -	dw-v	mitm01.home – it	muser – Administrator *ADMIN	MODE*				
	uster N	Cluster lamelist ilable	Co I dw-vmwas0	nnection Name 91.home(1415) 1Q Channel Defin	Transport Type TCP tion Detail -	Batch Size 50 dw-vi	Maximum Cur Msg Len Defn 4194304 Yes mitm01.home - it	Sender Channel from MQWS01					

Illustration 8: Workspace DWMQ Channel Definition Detail

Each single parameter for the selected channel is displayed.

For a view parameters, additional information is available. The provided link will guide you to the required information. In this sample, the transmission queue parameter is highlighted with a link symbol.

	MAXMOUL	Maxin	ium message iengm	FOCECTE
	XMITO	Trans	mission queue name	MQW501_2
< .	DW XmitO S	tatus	g MCA convert data	No
			mita msa wait in s	6000

This link will guide to the workspace <u>DWMQ Queue Status</u> for the named transmission queue (here: MQWS01_2).



4.3 Navigator Item Channel Performance Summary

This Navigator Item has two workspaces.

	~							-		
9	6	View: DW	/MQ Web	bSpher	MQ Sum	mary			•	20
	WMQ WebSp	ohere MQ Sun	nmary							
-	📱 DWMQ Ch	annel Definiti	on Summ	nary						
- 4	DWMQ Ch	annel Perforn	nance Su	mmary						
-	DWMQ	Workspac	e I		DWMQC	hannel Pe	erformal	nce Si	um	many
					1	114 1144				1

The default workspace is the one with same name as the navigator item, named "DWMQ Channel Performance Summary". The other one is presenting a comprehensive view on Sender/Receiver Channels and the involved objects.

4.3.1 Workspace DWMQ Channel Performance Summary

This workspace delivers a status overview for all channels in all reporting queue managers.



Illustration 10: Workspace DWMQ Channel Performance Summary

The workspace consists of two table views and one bar chart:

• Reporting Queue Managers (Table View)

This table displays the channel summary overview from the queue manager perspective. The list of the queue manager indicates the number of potential reporters for the other table and the bar chart (see below).



	Re	porting Queue Man	agers			
		Origin Node	▲ QMgr Name		Host Name	
5		NOWEA1 1	NOWFOI 1	also.	-vmwas01	
	æ	DWMQ Limit To C)ueue Manager		-vmwas01	Τ
					-vmwas02	
	æ	> Link Wizard			-vmwas02	
	æ	Link Anchor			-vmwas01	
		ing increasing	ing inscrete	-	-vmwas02	Τ

By using the provided context sensitive link on one of the table lines you can limit the output in the other views.

Channel Statistics

In this table channel statistics details from all channels in the entire MQ network are displayed (except a limitation has been set, by using one of the provided links – from this workspace or from another workspace). The provided links present more specific information on a single channel:

a	hannel Statistics							
	Origin Node	Channel Type	A Chi Ni	annel ame	Connection Name	Channel Status	In-Doubt Status	XmitQ Depth
	MQWS01_2::MQ	RCVR	MQW501_1.M	QW501_2		Inactive	n/a	0
	MQWS01_1::MQ	SDR	MQW501_1.M	QW501_2	dw-vmwas01.home(1415)	Inactive	n/a	0
•	MQW502_1::MQ	RCVR	MQW501_1.M	QWS02_1		Inactive	n/a	0
8	MQW501_1::MQ	SDR	MQW501_1.M	QWS02_1	dw-vmwas02.home(1414)	Inactive	n/a	0
8	MQW502_2::MQ	RCVR	MQW501_1.M	QW502_2	192.168.0.31	Running	No	0
9	MOWS01 1.MO	SUB	MO30501 1 M	2WS02_2	dw-vmwas02.home(1415)	Running	Yes	18396
œ	DWMQ Channel P	air Displa	У	WS01_1	dw-vmwas01.home(1414)	Retrying	Yes	7108
	DWMO Count/Door	al a Chan		WS01_1	192.168.0.31	Inactive	n/a	0
œ	Dimmiq Send/Rec	eive Chan	nei Overview	WS02_1	dw-vmwas02.home(1414)	Inactive	n/a	0
œ	DWMQ Queue Ma	anager List	ener Status	WS02_1		Inactive	n/a	0
				WS02_2		Inactive	n/a	0
🐵 DWMQ Transmission Queue Status			e Status	WS02_2	dw-vmwas02.home(1415)	Inactive	n/a	0
en DWMO Channel Definition Details				WS01_1		Inactive	n/a	0
	- oning channel e	- crimition e		WS01 1	dw-vmwas01.home(1414)	Inactive	n/a	0

• DWMQ Channel Pair Display:

For sender/receiver channels the sending and receiving part of the channel are displayed. The link is enable for channels of type SDR and RCVR only. The link points to the current workspace, simply limiting the output to the selected channel pair.

• DWMQ Send/Receive Channel Overview

For sender channels the sending and receiving part of the channel are displayed. Additionally the referenced transmission queue and the Dead-Letter Queue on the receiving systems are displayed. The link is enable for channels of type SDR only. A detailed description of the target workspace <u>DWMQ Send/Receive Channel Overview</u> is given below.

• DWMQ Queue Manager Listener Status

Display the listener status for the selected channel's queue manager using the workspace <u>DWMQ Queue Manager Listener Overview</u>. This link is always enabled.

• DWMQ Transmission Queue Status

Link to the workspace <u>DWMQ Queue Status</u> to display the status details on the channel's referenced transmission queue. This link is only available for channels referencing a transmission queue.

• DWMQ Channel Definition Details

This is a reference to the workspace <u>DWMQ Queue Definition Details</u>. The link is always enabled.





The following thresholds have been defined to the table view:

• Transmission Rate (Bar Chart)

Displays the transmission rate on channels, where the transmission rate is greater than zero.



4.3.2 Workspace Send/Receive Channel Overview

This workspace gives a comprehensive overview of the selected sender/receiver channel pair and its related queue objects.



Illustration 11: Workspace Send/Receive Channel Overview

The workspace is composed out of six sensors.

• Transmission Rate (Bar Chart)

The data transfer rate in kilobytes for the channel stub per queue manager.

• Bytes Sent/Received in Interval (Bar Chart)

The data transfer per direction and channel stub per queue manager.

Transmission Queue (Bar Chart)

Usage of the transmission queue.

By using the second mouse button inside the bar chart, a direct link to the <u>transmission queue</u> <u>status</u> is available.

📊 Transmission Q	ueue			/ 🗆 🖯 🗙
	50,000 (MC	Take Action	•	
MQWS01_1		Link To	•	🐵 Link Wizard
		🔂 Launch		🐵 DWMQ Transmission Queue Status
		🚝 Export		
		🚦 Configure Queue		
	10,000	Clear Queue		0.000 50.000

The link will guide to the workspace DWMQ Queue Status.



Dead-Letter Queue on Target System (Bar Chart)

Usage of the Dead-Letter Queue on the target system.



The bar chart context sensitive available link DWMQ Dead-Letter Queue Status will guide directly to the workspace <u>DWMQ Queue Status</u> and display the status of the Dead-Letter queue.

Channel Statistics (Table View)

In this table channel statistics details for the sender and receiver part of the selected channel from the two involved queue managers are displayed.

E Channel Statistics									
	Origin Node	Channel Type	Channel Name						
	MQW502_2::MQ	RCVR	MQW501_1.MQW502_2						
	MOW501 1::MO	SDR	MQW501_1.MQW502_3						
æ	DW Channel Pair I								

The provided link on the table rows will guide back to the workspace <u>DWMQ Channel</u> <u>Performance Summary</u>, limiting the channel selection to the current scope.

The following thresholds are defined for that table:



Transmission Queue Statistics (Table View)

In this table, usually only one row is displayed, the detailed queue statistics for the transmission queue.

🔛 Transmission Queue Statistics									
	Origin Node	Page Set ID	Queue Name	2	Queue Usage				
	MOWED1 1.MO		MOMEOR	2	XmitQ				
<u>ا</u>	😎 DWMQ Transmis	sion Queue	Status						
	📾 Link Wizard								
	🐵 Link Anchor								

The link will guide to the workspace <u>DWMQ Queue Status</u>.





The following thresholds are define for that table:



4.4 Navigator Item DWMQ Cluster Queue Manager Summary

This navigator item has only one workspace, having the same name.



Illustration 12: Workspace DWMQ Cluster Queue Manager Summary

The workspace gives an overview all defined clusters and the used cluster channels.

• Queue Managers with Cluster Usage (Bar Chart)

The bar chart displays the number of cluster channels existing on each queue manager.

Cluster Queue Manager Channels (Table View)

This table lists all currently defined cluster channels across all queue manager.

The provided link "DWMQ Queues in Cluster" displays all queues defined within the selected cluster.

C 🛄	Eluster Queue Manager Channels										
	Origin Node	Channel Type	Clust QMg								
	MQW501_1::MQ	ClusQmgr	MQWSCL								
69	MQWS01_1::MQ	ClusQmgr	MQWS0:								
	MQWS01_1::MQ	ClusQmqr	MQWSCI								
e	DWMO Oueues in	n Cluster	1QWSCI								
			1QWSCI								
<u> </u>	🔊 Link Wizard		AGM20:								
			1QW50:								
G	Link Anchor		1QWSCI								

The link redirects the user to the workspace DWMQ Queue Definition Summary.



4.5 Navigator Item DWMQ Dead-Letter Queue Messages Summary

4.5.1 Workspace DWMQ Dead-Letter Queue Messages Summary

The workspace gives an overview of the usage of the Dead-Letter queues for all queue managers.



Illustration 13: Workspace DWMQ Dead-Letter Queue Messages Summary

The workspace contains two views:

- Dead Letter Queue Filling (Bar Chart)
 - The chart shows the maximum queue depth compared to the current queue depth for each queue manager.
- Dead Letter Queue Summary for All Reporting Queue Manager (Table View)

The tables displays all reporting queue manager's status in details.

The following link is defined for the table entries:

i 🎹 C	Dead Letter Queue Summary for All Reporting Queue Managers											
	Origin Node 🔺 QMgr H Name Na			Host QMgr Jame Status								
	MQW501_1::MQ	MQW501_1	dw-vmwas01		Active	SYSTEM.DE4						
(65)	MOW501 2MO	MOW501.2	chw_xa	mwas01	Active	SYSTEM.DEA						
	∋ DWMQ Dead-Let	ter Queue Messa	ges	mwas02	Active	SYSTEM.DEA						
				mwas02	Active	SYSTEM.DE/						
	∋ Link Wizard			mwas02	Active	SYSTEM.DEA						
	∋ Link Anchor											

The link is available only for those table rows, where the current Dead-Letter Queue depth is greater than zero. The link will guide to the workspace <u>DWMQ Dead Letter Queue Messages</u>





The following thresholds have been defined for the table:



4.5.2 Workspace DWMQ Dead Letter Queue Messages

This workspace displays all current messages on a selected Dead-Letter queue on a single queue manager.

Warning:

Navigating to this workspace directly, without required context information (Queue Name and Queue Manager Name) will lead to extensive CPU and network usage on the WebSphere MQ hosting system as well as on the entire ITM infrastructure, because messages from all Dead-Letter queues in the entire WebSphere MQ scope will be gathered, transferred and displayed.

Elle Edit View Help () · ()	2
	2
Kavigator ± III B × II	-0
Control Control <t< th=""><th>lepth laximum</th></t<>	lepth laximum
🔛 Dead Letter Queue Analysis 🖉	
Origin Node Dest. Dest. Dest. Message Reason Segmented or Msg DLQ Appl DLQ DLQ Put Appl Appl ID Put Date & Time Group ID Sta	us
MQWS01_2::MQ MQWS01_2 DWLAB.MQDEMO.RINGAPP.QLOCAL 6DD1FEEB 2161 No 2602 UNIX amgrmppa 07/28/09 18:24:48 UNIX amgrpput 07/28/09 18:19:55 OK	414D512
	2
🕒 Hub Time: Thu, 08/20/2009 12:47 PM 💽 Server Available DWMQ Dead-Letter Queue Messages - dw-vmitm01.home - itmuser - Administrator "ADMIN MODE"	

Illustration 14: Workspace DWMQ Dead Letter Queue Messages

• Dead-Letter Queue Filling (Bar Chart)

This bar chart shows the current queue depth compared to the maximum queue depth of the Dead-Letter queue

• Dead-Letter Queue Analysis (Table View)

In this table all current messages on the Dead-Letter Queue are displayed, each message in a single row. The attributes displayed, are parts of the Dead-Letter queue header and the message header. The reason code describes, why the message was put onto the Dead-Letter queue.

The provided links may be used, to lead to a better understanding of the misbehavior:

E	D	ead Letter Queue Ar		
		Origin Node	Dest. QMgr	Dest. Queue
F	•	∍ DWMQ Destinati	on Queue Statu	AB.MQDEMO.RINGAPP.QLOCAL
	œ	⊛ DWMQ Message	Details	
	(6	© DWMQ Message	Details	



• Link DWMQ Destination Queue Status

This link is intended to help to analyze the reason why the message was not put onto the target queue. Who is the queue doing? Which readers are consuming the arriving messages?

The target workspace is <u>DWMQ Queue Status</u>.

• Link DWMQ Message Details

This link will guide to the workspace <u>DWMQ Queue Message Details</u> to display the queue message descriptor and content. This might help to understand how to proceed with the message delivery, after the message has been put onto the Dead-Letter queue.



4.6 Navigator Item DWMQ Error Log Summary

This navigator item has only one workspace, having the same name.

4] DWMQ Error Log Summary - dw-vmitm01.home - itmuser - Administrator *ADMIN MODE*																	
<u>F</u> ile <u>F</u>	Edit ⊻iew <u>H</u> e	lp																
<⇒ •	- 🚽 🛅 📮	📰 📧 🎠 🧇 🔜	8 🖻 🖶 🛛	0 😂 🙆	(1) 🖽 🗞 🖬 🗠	2 😂 🛄	🖪 🖻 💽 🖵	2 🗇	💷 🧿 🏅	ኔ 📰 🏄 📵								2
	avigator		\$	ШВ×	Reporting Queue Ma	nagers										13	: 0 8	= ×
0 🤣	View	DWMQ WebSphere MQ	Summary	- 25	Origin Node	QMgr	Host	QMgr	Host	Start	QMgr	QMgr	DLQ	DLQ	Monitored	Local	Remote	Alias
Ø n	WMO WebSobe	re MO Summary			MOWED1 1UNO	Name MOWEO1 1	Name	Subsys	Jobname	Date & Lime	Status	Type	Depth	Maximum	Queues	Queues	Queues	Queue
	Divide Char	ne ne sainnaiy			MOWEO1 2:MO	MOWSOI 2	dw-vmwas01			08/20/09 11:15:00	Active	Linux	1	1024	44	24	2	_
	Divinity Chan	iei Dennition Summary			MOWS01_2MQ	MOWS01_2	dw-vmwas01	-		08/20/09 11:15:00	Active	Linux	1	1024	40	33	2	_
	DWMQ Chan	nel Performance Summar	Ý		MOWS02_2::MQ	MOWS02_2	dw-vmwas02			08/20/09 11:15:00	Active	Linux	- 0	1024	43	33	3	
	DWMQ Clust	er Queue Manager Summ	ary		MOWSCL01::MQ	MOWSCL01	dw-vmwas01			08/20/09 11:15:00	Active	Linux	Ő	1024	39	30	1	
- 🖗	🖣 DWMQ Dead	-Letter Queue Messages	Summary		MOWSCL02MO	MOWSCI 02	dw-vmwas02			08/20/09 11:15:00	Active	Linux	0	1024	40	31	1	_
- 9	DWMO Error	Log Summarv				1	1	_		1								
		ries Events Summon/																
1 3		nes Events Summary																
	D MM Q Queu	e Definitions Summary																
	🖥 DWMQ Queu	e Manager Status Summa	ry															
- 9	🖥 DWMQ Queu	e Statistics Summary																
L			1															
i 📢	Physical 🧧	DWMQ WebSphere MQ	Summary	:				4										- F
·				i -				_										
🛄 Er	rror Log															13	¥ II 🖻	□ ×
	QMgr Name	🔻 Log Date & Time	🔕 Message ID		Involved Object		Message Te	ext			Ехр	lanatior	1		L	ser Action	Host Na	me
3	MQW501_2	08/20/09 13:10:37	AMQ9506	MQW501_2.M	QW501_1	Message n	eceipt confirmatio	on failed.		Channel 'MQWS01_2.MC	QWS01_	1' has e	nded be	ecause the r	remot T	he erro	dw-vmv	i 🔺
	MQWS01_2	08/20/09 13:10:37	AMQ99999	MQW501_2.M	QW501_1	Channel pr	ogram ended ab	onormally.		Channel program 'MQW	501_2.1	1QW503	l_1' end	led abnorm:	ally. L	ook at p	dw-vmw	I
	MQW501_1	08/20/09 13:10:36	AMQ99999	MQW501_2.M	QW501_1	Channel pr	rogram ended ab	onormally.		Channel program 'MQW.	501_2.M	1QW501	l_1' end	led abnorm:	ally. L	ook at p	dw-vmw	L
	MQWS01_1	08/20/09 13:10:36	AMQ9511	DWLAB.MQDE	MO. AM QSPUT C. QLOCA	L Messages	cannot be put to	a queue.		The attempt to put mes	sages ti	o queue	'DWLAE	3.MQDEMO.	AMQS E	nsure th	dw-vmw	L
	MQW501_2	08/20/09 13:10:36	AMQ9527	MQW501_2.M	QW501_1	Cannot ser	nd message throu	ugh chann	nel 'MQ	The channel has closed	becaus	e the re	mote qu	ueue manag	ier can C	ontact t	dw-vmw	L
	MQWS01_1	08/20/09 13:10:36	AMQ7469			Transactio	ns rolled back to	release li	og spa	The log space for the qu	ueue ma	anager	is becon	ning full. On	e or T	ry to en	dw-vmv	<i>l</i>
	MQW501_1	08/20/09 13:10:36	AMQ9511	SYSTEM.DEAD	LETTER.QUEUE	Messages	cannot be put to	a queue.		The attempt to put mes	sages ti	o queue	SYSTER	M. DEAD. LET	TER E	nsure th	dw-vmw	£
	MQWS01_1	08/20/09 13:10:36	AMQ9544	MQW501_2.M	QW501_1	Messages	not put to destin:	ation que	ue.	During the processing or	f chann	el 'MQW	501_2.N	4QW501_1'	one o E	camine	dw-vmw	<i>t</i>
	MQW501_2	08/20/09 13:10:01	AMQ7234	MQW501_1		10000 me	ssages from que	eue 'MQWS	501_1'	10000 messages from	queue N	1QW501	l_1 have	e been loadi	ed on N	one.	dw-vmv	t
-	MQWS01_1	08/20/09 13:10:01	AMQ9002	MQWS01_2.M	QW501_1	Channel 'M	QWS01_2.MQWS	01_1'is s	starting.	Channel 'MQWS01_2.MC	2WS01_	1' is sta	rting.		N	one.	dw-vmv	1
	MQW501_2	08/20/09 13:10:00	AMQ9002	MQW501_2.M	QW501_1	Channel 'M	QWS01_2.MQWS	01_1' is s	starting.	Channel MQWS01_2.MC	200501_	1' is sta	rting.		N	one.	dw-vmw	<i>L</i>
L	MQWSCL02	08/20/09 12:56:37	AMQ9545	TO MOWSELO	2. DWLABCE	Disconnect	Interval expired	Miangui -	u al a al	Channel TO.MQWSCL02	. D WLAE	ICL: Clos	ed beca	ause no mes	ssages N	one.	aw-vmw	<i>l</i>
L	MQ#SCL02	08/20/09 12:56:37	AM09001	TO MOWSCLO	2.DWLABCL	Channel 1	U.MQWSCL02.DV	MEARCE, 6	naea	Channel TO.MQWSCL02	DWLAE	ICL: enc	ied norn	nairy.	N	one.	aw-vmw	<i>l</i>
	MQW501_2	08/20/09 12:56:35	AmQ9545	TO MONSCLU	2. DWLABCL	Chapped	o Mowscios pred	MIADOL -	ndod	Channel TO MOWSCL02	DWLAE	ICL CIOS	eu peca	ause no mes	sages N	one.	uw-vmw	1
	MQWS01_2	08/20/09 12:56:35	AMOOF 45	TO MONSCLO	2.DWLABCL	Channel 1	interrel expired	WEARCE, 6	nuea	Channel TO MOWSCL02	DWLAE	CL'enc	ed norn	nany.	N N	one.	dw-vmw	Sec.
	MQWSCL02	08/20/09 12:56:32	AM000001	TO MOWSCLO	2.DWLABCL	Channel	o MowEcLos Da	NI ADCULA	ndod	Channel TO MOWSCL02		ICL LIUS	ied pers	ause no mes	ssages N	one.	Chu Long	5
	MQWSCL02	08/20/09 12:56:32	AMOOF 45	TO MONSCLU	2. DWLABCL	Disconnect	internal expired	MEMOCE, 6	nueu	Channel TO MQWSCL02		ICL' clor	eu norn	nany.	icogor h	one.	dw-vmw	5
	MOWSCL02	08/20/09 12:56:22	AM09001	TO MONSOI		Channel 'T	o Mowsol 2 Di	NI ARCL' A	ndad	Channel TO MOWSOI 2 Channel TO MOWSOI 2		ICL' ond	ied norn	ause nu mes poliky	sayes N	one.	dw-vmp	
	MOWSCL02	08/20/09 12:56:32	AM09545	TO MONSO1	1 DWLABCL	Disconnect	interval evoired	NEMBLE B	nueu	Channel 'TO MOWS01_2	DWLAE	ICL' clos	ed hers	nany. Nico no mos	reanes h	one.	dw-vmv	
	MOWSCL02	08/20/09 12:56:22	AM09001	TO MOUSO1		Channel 'T	0 MONZOT 1 DA	MLARCL' A	nded	Channel 'TO MOWSOI 1		CL' enc	led norm	nalkz	Nuges IN	one.	dw-vmw	
	MOW501 1	08/20/09 12:56:31	AM09545	TO MONSO1		Disconnect	interval expired			Channel 'TO MOWSOI 1		CL' des	ed hers	ause no mes	ssanes N	one	chir-ymy	
		00,20,00 12.00.01	14100010	1.0.000001		Disconflect				channel romow001_1			- a bete	and no me:	rangeo It	one.		
		🕒 Hub Time: Thu,	08/20/2009 01	:13 PM	😲 Server Avai	lable		DWMQ Er	ror Log Su	mmary - dw-vmitm01.h	iome – i	itmuser	- Admir	nistrator */	ADMIN MOE	E*		

Illustration 15: Workspace DWMQ Error Log Summary

This workspace gives a consolidated view on the WebSphere MQ error logs across all reporting queue manager. This helps to quickly identify reasons for a misbehaving MQ transaction.

• Reporting queue manager (Table View)

This table shows the status of all reporting queue managers. The following link has been defined:

🛄 Ri	eporting Queue Man	agers					
	Origin Node	QMgr Name	H	Host Iame	QMgr Subsys	Host Jobname	
	MOW501 1.MO	MONIS01_1	char-yr	nwas01			
• e	DWMO Limit To	Oueue Manage	r	hwas01			ľ
6		~ <u>-</u>		nwas02			ľ
<u> </u>	∋ Link Wizard			hwas02			Γ

The link will recursively call this workspace, limiting the error log entries to the selected queue manager.





The following thresholds have been defined to the table view:

Error Log (Table View)

•

The table contains error message from all WebSphere MQ queue managers reporting to that infrastructure.

The provided links should be used with care, because the context of the table column "Involved Object" is not always clear, so that the links are always enabled, regardless the objet type.

	🔲 Er	ror Log			
		QMgr Name	▼ Log Date & Time	🔕 Message ID	Involved Object
I		MQW501_2	08/20/09 13:10:37	AMQ9506	MQWS01_2.MQWS01_1
[MQW501_2	08/20/09 13:10:37	AMQ9999	MQWS01_2.MQWS01_1
[8	MQW501_1	08/20/09 13:10:36	AMQ9999	MQW501_2.MQW501_1
[<u>_</u>	MO3WS01_1	08/20/09 13:10:36	AMQ9511	DWLAB.MQDEMO.AMQSPUTC.QLOCAL
[œ	DWMQ Chani	nel Status	AMQ9527	MQWS01_2.MQWS01_1
[DWMO OWN		AMQ7469	
	œ	D WMQ Queu	e Status For Queue	AMQ9511	SYSTEM. DEAD. LETTER. QUEUE
[æ	Link Wizard		AMQ9544	MQWS01_2.MQWS01_1
ſ		LIIK WIZdiu		AM07234	MOW501 1

• DWMQ Channel Status

If the involved object is a channel, use this link to get to workspace <u>DWMQ Channel</u> <u>Performance Summary</u> to see the channel status details. From there, inspect the channel definition, if required.

• DWMQ Queue Status

If the involved object is a queue, this link will guide to the queue status display. From that point, you may take a closer look onto the queue definition attributes, queue messages and so on. The workspace <u>DWMQ Queue Status</u> is used.



The following thresholds have been defined for that table:



The highlighting shows only a few message codes, indicating a remarkable error condition in WebSphere MQ. Additionally messages may be picked from the <u>WebSphere MQ messages</u> and codes guide, to be set as a threshold.



4.7 Navigator Item DWMQ MQSeries Event Summary

This navigator item has only one workspace, having the same name.

DWMQ MQSeries Events Summary - dw-vmitm01.h	ome - itmuser - Administrator *A	MIN MODE*		_ 8 X
<u>File Edit View H</u> elp				
(¬ + ¬ + [™] □ 🖳 🖽 🕫 № (◆ ¬ № (𝔄 🕮 ○) ○ 20 (𝔅)) (I) 🖽 😡 🖬 🖾 🛋 🛄 🛛 🤅	國 🖓 🧟 🖅 🖿 💽 🔥 🎫 🌌 😰		20
🐔 Navigator 🌲 🗉 🖯 🗙	🌐 Queue Manager Status Overview			$\checkmark \Rightarrow \square \boxminus \square \times$
🛞 🌏 View: DWMQ WebSphere MQ Summary 💌 🕅	Origin Node QMgr	Host QMgr Host Start	OMgr OMgr DLQ DLQ Monitored	Local Remote A
📲 DWMQ WebSphere MQ Summary	MQWS01_1::MQ MQWS01_1 dw-	mwas01 08/20/09 11:15:00	Active Linux 1 1024 44	34 2
🗕 📲 DWMQ Channel Definition Summary	MQWS01_2::MQ MQWS01_2 dw-	mwas01 08/20/09 11:15:00	Active Linux 1 1024 46	35 3
- 🚰 DWMQ Channel Performance Summary	MQW502_1::MQ MQW502_1 dw- MQW502_3::MQ MQW502_3 dw	mwas02 08/20/09 11:15:00	Active Linux 0 1024 43	33 3
🗕 🚽 DWMQ Cluster Queue Manager Summary	MOWSCL01::MO MOWSCL01 dw-	mwas01 08/20/09 11:15:00	Active Linux 0 1024 45	30 1
– 🎴 DWMQ Dead-Letter Queue Messages Summary	MQWSCL02::MQ MQWSCL02 dw-	mwas02 08/20/09 11:15:00	Active Linux 0 1024 40	31 1
- 🐴 DWMQ Error Log Summary				
 DWMQ MQSeries Events Summary 				
– 📲 DWMQ Queue Definitions Summary 🛛 –				
🗕 📲 DWMQ Queue Manager Status Summary				
🗆 🖳 DWMQ Queue Statistics Summary				
Physical 🌾 DWMO WebSphere MO Summary				
Event Event Resource Int	ernal Reporting Reporting			
Origin Node Date & Time Event QMgr Name Host Name Name Ev	entID Qmgr Name Host Name			
Hub Time: Thu, 08/20/2009 03:03 PM	😲 Server Available	DWMQ MQSeries Events Summary - dw-vmitm01.	.home - itmuser - Administrator *ADMIN MODE*	

Illustration 16: Workspace DWMQ MQSeries Event Summary

The workspace gives you a comprehensive overview of all WebSphere MQ events across all reporting queue manager.

• Reporting queue manager (Table View)

This table shows the status of all reporting queue managers. The following link has been defined:

🛄 R	eporting Queue Man	agers				
	Origin Node	QMgr Name	H	Host Iame	QMgr Subsys	Host Jobname
	MO36501 1MO	MONIS01_1	char-yr	nwas01		
G (DWMO Limit To	Oueue Manage	er	hwas01		
		hwas02				
e e	⊜ Link Wizard			hwas02		

The link will recursively call this workspace, limiting the event entries to the selected queue manager.





The following thresholds have been defined to the table view:

WebSphere MQ Events (Table View) This table displays all currently existing events from all reporting queue managers.

•



4.8 Navigator Item DWMQ Queue Definition Summary

This navigator item has two workspaces.



Illustration 17: Available workspaces

The default workspace is the one with same name as the navigator item, named "DWMQ Queue Definition Summary". The other one is presenting detailed information for a selected Queue Definition.



4.8.1 Workspace DWMQ Queue Definition Summary

The workspace delivers a comprehensive overview of all queue definitions from all reporting WebSphere MQ queue managers.

2	DWMQ Queue	Definitions Summary	- dw-vmitr	n01.home	- itmuse	r - Adminis	strator *ADMI	N MOD	×								-	. 🗆 🗙
File I	Edit View Help																	
↓ -	e) - 🛅 🔛 🛛	🖂 📧 📉 🧇 🔜 🏭 🖂	# 00	2 🕜 🌗	💷 😡	a 🖂 💌 🐔	s 🛄 🖪 🗉 🐼	Ģ 🧕 :	/	0 <u>~</u> =	i 🧭 😑							20
	lavigator	± □ ⊟ ×	Reporting	Queue Manager	r												* 🗆	B 🗆 ×
0 🤣	View: DWMQ We	bSphere MQ Summary	Origir	n Node	A QMgr	Host	Monitored	Local Re	mote Al	lias Tra	ansmit Pr	redefined	Dynamic Borm, Oc	Dynamic Tomp Oc	Cluster			
🖪 D	WMO WebSphere M	IO Summary	MON201	1.1.MO MC	10501 1	dw_vmwas	01 44	24	7 2	1	4	24	Territ Q3	Temp Q3	Queues 1			
1 C 🗸	DiiMO Channel F	efinition Summany	MON201	1.2MO MC	10501_1	dw-ymwas	01 46	35	2	1	4	35	0	0	1			
	Diving channel b	venintion Summary	MOW503	2 1 MO MC	00502 1	dw-ymwas	02 43	33	3	1	4	33	0	0	0			
	UWMQ Channel P	errormance summary	MOWSO2	2 2::MO MC	WS02 2	dw-vmwas	02 43	33	3	1	4	33	0	0	0			
	DWMQ Cluster Qi	Jeue Manager Summar	MOWSCI	.01::MO MC	WSCL01	dw-vmwas	01 39	30	1	1	1	30	0	0	1			
1 - 9	DWMQ Dead-Let	ter Queue Messages St 😑 🚺	MQWSCL	.02::MQ MC	WSCL02	dw-vmwas	02 40	31	1	1	1	31	0	0	1			
1 - 2	DWMQ Error Log	Summary																
	DWMO MOSeries	Events Summary																
		finitions Summon																
	DWMQ Queue De	minuons summary																
	DWMQ Queue Ma	inager Status Summary																
	DUMO Ououo Sta	dictice Summany																
l.	🐔 DWMQ WebSp	here MQ Summary																
	😋 Pi	nysical																
🛄 D	efined Queue Object	ls															÷ 0	I I I X
	Origin Node	▲ Queue Name		Queue	Queue	Definition Type	Creation Date & Time	Cur	Put	Defaul	It Defaul	t		Quei (C	ue Descrip	ption d)		
	MOWS01_1MO	DWI AB MODEMO AMOSPLITO		Local	Normal	Predefined	07/23/09 16:24	25 Yes	Enabled	(0 Yes	Local Or	ielie for th	e function	AMOSPUT	C MODEMO &Custor	on	Local Out 🗚
	MOWS02_2::MO	DWLAB MODEMO AMOSPUTO	REMOTE	Remote	n/a	n/a	n/a	Yes	Enabled		0 Yes	Remote	Oueue for	DIM AR M	ODEMO	AMOSPUTC on OM MO	050	Remote i
	MOWS02 1::MO	DWLAB. MODEMO, AMOSPUTO	REMOTE	Remote	n/a	n/a	n/a	Yes	Enabled	0	0 Yes	Remote	Oueue for	DWLAB, M	ODEMO.	AMOSPUTC on OM MO	NS0	Remote
	MOW501_2::MO	DWLAB.MODEMO, AMOSPUTC	REMOTE	Remote	n/a	n/a	n/a	Yes	Enabled	(0 Yes	Remote	Oueue for	DWLAB, M	ODEMO.	AMOSPUTC on OM MO	NSO	Remote -
	MQWSCL01::MQ	DWLAB.MQDEMO.CLUSSAMP.	QLOCAL	Cluster	n/a	n/a	n/a	Yes	Enabled	(0 Yes	Local Q	Jeue for th	ne function	CLUSSAMI	P, MQDEMO, &Custom	ir)	Local Qu
	MQW501_2::MQ	DWLAB.MODEMO.CLUSSAMP.	QLOCAL	Cluster	n/a	n/a	n/a	Yes	Enabled	(0 Yes	Local Q	Jeue for th	ne function	CLUSSAME	P, MODEMO, &Custom	er)	Local Qu
	MQWS01_1::MQ	DWLAB.MQDEMO.CLUSSAMP.	QLOCAL	Cluster	n/a	n/a	n/a	Yes	Enabled	(0 Yes	Local Q	ueue for th	ne function	CLUSSAMI	P, MQDEMO, &Custom	ir)	Local Qu
	MQWSCL02::MQ	DWLAB.MQDEMO.CLUSSAMP.	QLOCAL	Local	Normal	Predefined	07/23/09 16:16	21 Yes	Enabled		0 Yes	Local Q	ueue for th	ne function	CLUSSAME	P, MQDEMO, &Custom	er)	Local Qu
	MQWSCL02::MQ	DWLAB.MQDEMO.CLUSSAMP.	QLOCAL	Cluster	n/a	n/a	n/a	Yes	Enabled	(0 Yes	Local Q	ueue for th	ne function	CLUSSAM	P, MQDEMO, &Custom	er)	Local Qu
	MQWS01_2::MQ	DWLAB.MQDEMO.RINGAPP.IN	VITQ.	Local	Normal	Predefined	07/23/09 16:24	08 Yes	Enabled	(0 Yes	Initiation	nqueue f o	bige Anwer	ndung			Initiation
	MQWS01_2::MQ	DWLAB.MQDEMO.RINGAPP.Q	LOCAL	Local	Normal	Predefined	07/23/09 16:24	:08 Yes	Enabled	(0 Yes	Local Q	ueue for th	ne function	RINGAPP,	MQDEMO, &Customer)	Local Qu
	MQWS02_2::MQ	DWLAB.MQDEMO.RINGAPP.R	EMOTE	Remote	n/a	n/a	n/a	Yes	Enabled	(0 Yes	Remote	Queue for	DWLAB, M	QDEMO,	RINGAPP on QM MQWS	02_1	Remote
	MQWS02_1::MQ	DWLAB.MQDEMO.RINGAPP.R	EMOTE	Remote	n/a	n/a	n/a	Yes	Enabled	0	0 Yes	Remote	Queue for	r DWLAB, M	QDEMO,	RINGAPP on QM MQWS	01_2	Remote
	MQWS01_2::MQ	DWLAB.MQDEMO.RINGAPP.R	EMOTE	Remote	n/a	n/a	n/a	Tes	Enabled	(0 Yes	Remote	Queue for	DWLAB, M	QDEMO,	RINGAPP on QM MQWS	02_2	Remote
	MQWS01_1::MQ	DWLAB.MUDEMU.KINGAPP.K	EMUTE	Kemote	n/a	n/a Dame Dem	n/a	Tes	Enabled		0 Yes	Kemote	Queue tor	r DWLAB, M	QUEMU,	KINGAPP ON UM MUNC	02_2	Kemote I
	MQWSCLUTMQ	KBKUPERMMODEL		Model	Normal	Permoyn	07/23/09 16:24	17 Tes	Enabled		0 Yes	_						
	MQWS01_1MQ	KBKUPERMMODEL		Model	Normal	PermDyn	07/23/09 16:24	12 Yes	Enabled		0 Yes	_						
	MOWSCL02::MQ	KRYUPERMMODEL		Model	Normal	PermDyn	07/23/09 16:16	20 Yes	Enabled		0 Yes							
	MONSO2 1:MO	KBYUPERMMODEL		Model	Normal	PermDyn	07/23/09 16:16	18 Yes	Enabled		0 Yes							
	MOWS01_2::MQ	KBYLIPERMMODEL		Model	Normal	PermDyn	07/23/09 16:10	04 Yes	Enabled		0 Yes							
	MOWS02 1:MO	MOWSO1 1		Local	XmitO	Predefined	07/23/09 16:16	20 Yes	Enabled		0 Yes	Transm	ission Ove	ue To MON	501 1			Transmis
	1			4	- mang		1 1.,22,00 20.20		Lindored				and a car	as is inqu				Þ
		Hub Time: Thu 08/20/20	00.02-21.PM		Conver A	milabla		MMO Ouro	un Dofinitie	and Summ	oons dw	ampitro 0.1	homo it	mucor Ar	Indinistrat	or #ADMINIMODE*		

Illustration 18: Workspace DWMQ Queue Definition Summary

The workspace consists of two table views:

• Reporting Queue Managers (Table View)

This table displays the queue summary overview from the queue manager perspective. The list of the queue managers indicates the number of potential reporters for the second table.

The following link has been defined:

🖽 R	eporting Queue Man	agers					
	Origin Node	QMgr Name	I N	Host Jame	QMgr Subsys	Host Jobname	
	MOW501 1.MO	MOW501 1	dw-ve	mwas01			
S (😎 DWMQ Limit To	Queue Manage	er	hwas01			Γ
	•			hwas02			Γ
C (😎 Link Wizard			hwas02			Γ

The link will recursively call this workspace, limiting the queue entries to the selected queue manager.



• Defined Queue Objects (Table View)

In this table all queue definition abstracts in the entire MQ network are displayed (except a limitation has been set, by using one of the provided links – from this or another workspace). To get more details about one specific queue, please use the provided links:

	🛄 D	efined Queue Objec	ts			
		Origin Node	▲ Queue Name		Queue Type	Que
I	60	MQW501_1::MQ	DWLAB.MQDEMO.AMQSPUTC.	QLOCAL	Local	Norm
		MQW502_2::MQ	DWLAB.MQDEMO.AMQSPUTC.	REMOTE	Remote	n/a
		MQW502_1::MQ	DWLAB.MQDEMO.AMQSPUTC.	REMOTE	Remote	n/a
		MOWED1 DUMO	DWI AD MODEMO AMOSDUTE	REMOTE	Remote	n/a
	- œ	DWMQ Target Que	eue Status	LOCAL	Cluster	n/a
		DWMO Quouo Dof	inition Dotails	LOCAL	Cluster	n/a
		D WINQ Queue Dei	inition Details	LOCAL	Cluster	n/a
	🗌 🚥	DWMQ Queues Us	ing This Queue As Target	LOCAL	Local	Norm
				LOCAL	Cluster	n/a
		DWMQ Queue Stat	us	rq	Local	Norm
				DCAL	Local	Norr

• DWMQ Target Queue Status

Displays the queue status for the target queue of the selected remote queue definition, using the workspace <u>DWMQ Queue Status</u>.

• DWMQ Queue Definition Details

Displays the queue definition details, using the workspace <u>DWMQ Queue Definition</u> <u>Details</u>

• DWMQ Channel Using this XmitQ

If the queue is marked as a transmission queue, the enabled link will display the channel performance data, using the workspace <u>DWMQ Channel Performance Summary</u>

• DWMQ Queues Using This Queue As Target

The link will guide to the current workspace to display all queues using the selected queue as their target.

• DWMQ Queue Status

Displays the queue status for the selected queue, using the workspace <u>DWMQ Queue</u> <u>Status</u>

The following thresholds have been set for this table:





4.8.2 Workspace DWMQ Queue Definition Details

This workspace should only be used as a link target from another workspace.

Warning:

Navigating to this workspace directly, without required context information (Queue Name and Queue Manager Name) will lead to extensive CPU and network usage on the WebSphere MQ hosting system as well as on the entire ITM infrastructure, because definition details for all queues in the entire WebSphere MQ scope will be gathered, transferred and displayed.

Below there is an example of that workspace, displaying detailed information for a remote queue definition.

DWMQ C	Queue Definition Details - dw-	vmitm	01.home - itm	user - Ad	Iministrato	r *ADMIN	MODE*					_ 0 X
<u>F</u> ile <u>E</u> dit <u>V</u> iew	Help											
🗇 • 🔿 • 📩	🔒 🗵 🕫 🔭 🚸 🗟 🏭 🔽 🛱		0 2 🚳 🌗	💷 🗞 🖬	i 🗵 🗹 😂	🛄 🖪 🗎	🛐 🖵 👲	🖅 🐚 🖸 🔥 📰 🍠 🥃)			20
🝓 Navigator	\$ □ ⊟ ×	🛄 Q	ueue Parameters								/ ₹	
🕘 🦑 View: DWI	MQ WebSphere MQ Summary 🔻 🕅		Origin Node		Queue Name		Parameter Name	Parameter Description		Parameter Value		Param Typ
📲 DWMQ WebSp	ohere MQ Summary	60	MQWS02_2::MQ	DWLAB.MQ	DEMO.RINGAR	PP.REMOTE	QNAME	Queue name	DWLAB.MQDEMO.RING	APP.REMOTE		
📙 🗕 🖪 DWMO Ch	annel Definition Summary	60	MQWS02_2::MQ	DWLAB.MQ	DEMO.RINGAR	PP.REMOTE	DESCR	Description	Remote Queue for DWL	AB, MODEMO, RINGAP	P on QM MQWS02	
🖉 DIIMO Ch	annel Porformance Summany	60	MQWS02_2::MQ	DWLAB.MQ	DEMO.RINGAR	PP.REMOTE	QTYPE	Type of queue	Remote			QMQ_DEF.Q
	anner enormance summary	60	MQWS02_2::MQ	DWLAB.MQ	DEMO.RINGAR	PP.REMOTE	DEFPSIST	Default msg persistence	Yes			QMQ_DEF.DI
🛛 – 🖬 DWMQ CIU	ister Queue Manager Summary	60	MQWS02_2::MQ	DWLAB.MQ	DEMO.RINGAR	PP.REMOTE	DEFPRTY	Default msg priority	0			
📗 – 🎴 DWMQ De	ad-Letter Queue Messages Summary	60	MQWS02_2::MQ	DWLAB.MQ	DEMO.RINGAR	PP.REMOTE	PUT	Msgs can be added	Enabled			QMQ_DEF.PL
🗏 – 🚰 DWMO Err	ror Log Summary	60	MQWS02_2::MQ	DWLAB.MQ	DEMO.RINGAR	PP.REMOTE	RQMNAME	Remote gueue manager	MQW502_1			
א האונם 🗐 💷	Saries Events Summany	60	MQWS02_2::MQ	DWLAB.MQ	DEMO.RINGAR	PP.REMOTE	RNAME	Remote queue name	DWLAB.MQDEMO.RING	APP.REMOTE		
Dwwd wd	zoenes Events Summary		MQWS02_2::MQ	DWLAB.MQ	DEMO.RINGAR	PP.REMOTE	XMITQ	Transmission queue name	MQW502_1			
🗌 – 📲 DWMQ Qu	eue Definitions Summary –	60	MQWS02_2::MQ	DWLAB.MQ	DEMO.RINGAR	PP.REMOTE	SCOPE	Scope of Q definition	QMGR			QMQ_DEF.SC
📗 – 💾 DWMQ Qu	eue Manager Status Summary	60	MQWS02_2::MQ	DWLAB.MQ	DEMO.RINGAR	PP.REMOTE	CLUSTER	Cluster name				
🗏 🗕 🚰 DWMO Ou	eue Statistics Summarv	60	MQWS02_2::MQ	DWLAB.MQ	DEMO.RINGAR	PP.REMOTE	CLUSNL	Cluster namelist				
	, , , , , , , , , , , , , , , , , , , ,	60	MQWS02_2::MQ	DWLAB.MO	DEMO.RINGAR	PP.REMOTE	DEFBIND	Default message binding	Open			QMQ_DEF.DI
		00	MQWS02_2::MQ	DWLAB.MQ	DEMO.RINGAR	PP.REMOTE	CLWLPRTY	Cluster workload priority	0			
		00	MQWS02_2::MQ	DWLAB.MQ	DEMO.RINGAR	PP.REMOTE	CLWLRANK	Cluster workload rank	0			
		60	MQWS02_2::MQ	DWLAB.MQ	DEMO.RINGAR	PP.REMOTE	DEFPRESP	Default put response type	Sync			QMQ_DEF.DI
 € DWM 	II IV Q WebSphere MQ Summary											
			<u> </u>									<u></u>
🛄 Defined Queu	e Objects				1	1					/ ₹	□⊟□×
Origin Node	Queue Name		Target Object Remote Queu	1	Remote QMgr	QMgr Name	Queue Type	Queue Definition Creation Usage Type Date & T	on Cur Put Di ime Defn Status Pr	efault Default riority Persist	Qu	eue Descriptior (Deprecated)
MQWS02_2::MQ	DWLAB.MQDEMO.RINGAPP.REMOTE	DWLA	8. MQDEMO. RINGAP	P.REMOTE	MQW502_1	MQW502_2	Remote	n/a n/a n/a	Yes Enabled	0 Yes Remote	e Queue for DWLAB,	MQDEMO, RIN(
		T										F
🛄 Queue Statisti	cs										/ ₹	
Origin Node Pag	e Set Queue Queue Definition Tota D Name Usage Type Open	l Inpu s Oper	it Output Cur Op ns Opens Exclu	ened Curre sive Dep	ent Highest H th Depth	High Depth %	Full Ret In Exceed	M Get Put Cur Tr led Status Status Defn Co	igger Trigger Trigger T ntrol Type Depth I	Trigger Creation Priority Date & Time	Storage Buffer Class Pool ID Tr	# of Msg an/Pgms Put
4												
	(Hub Time: Thu, 08/20/2009	04:27	PM () Server A	vailable		DWMQ (Queue Definition Details - dw	-vmitm01.home - itmuse	er – Administrator *AE	MIN MODE*	

Illustration 19: Workspace DWMQ Queue Definition Detail

• Queue Parameters (Table View)

Each single parameter for the selected queue is displayed.

For a few parameters, additional information is available. The provided link will guide you to the required information:

• DWMQ Transmission Queue Definition Details

The link will guide to the workspace to the current workspace, displaying the definition details of the referenced transmission queue.

• DWMQ Initiation Queue Definition Details

The link will guide to the workspace to the current workspace, displaying the definition details of the referenced initiation queue.



• Defined queue objects

In this (single row) table the selected queue definition abstract is displayed

The following thresholds have been set for this table:



Queue Statistics

In this (single row) table the queue statistics for the selected queue are displayed.

The following thresholds have been applied to this table:



For remote or alias queues, this table remains empty, because these objects have no physical implementation.



4.9 Navigator DWMQ Queue Manager Status Summary

This navigator item presents multiple workspaces to analyze the status of all reporting queue manager. There are three workspaces:



Illustration 20: Available Workspaces

These workspaces give a comprehensive overview of the queue manager and its surrounding components.

4.9.1 Workspace DWMQ Queue Manager Status Summary

The default workspace is displaying status and usage information for all reporting queue managers.



Illustration 21: Workspace DWMQ Queue Manager Status Summary

The following four data views are presented:

DLQ Usage Summary (Bar Chart)

Comparison between the current and the maximum depth of the Dead-Letter queue for all reporting queue managers, having messages on the Dead-Letter queue.



• Problematic Queue Watch Summary (Bar Chart)

Number of queues in problematic status, either with put/get disabled or high depth watermark reached. Only queue managers fulfilling this criteria are displayed.

Queue Manager Application Overview (Bar Chart)

For z/OS queue manager some application usage key metrics are shown.

• Queue Manager Status Summary (Table View)

This table shows the detailed queue manager status summary. All available attributes are displayed. To get more insight on a specific queue manager, use the provided links:

- 🐵 DWMQ Queue Manager Parameters
- DWMQ Listener Status
- 🐵 DWMQ Dead Letter Queue Status for QMgr ...
- DWMQ Error Log Summary for QMgr ...
- DWMQ Queue Statistics Summary for QMgr ...
- DWMQ Queue Definitio Summary for QMgr
- DWMQ Channel Performance Summary for QMgr ...
- DWMQ Channel Definition Summary for QMgr ...
- DWMQ MQSeries Events Summary for QMgr ...
- 🐵 DWMQ Linux OS Agent
- DWMQ Queue Manager Parameters

This link will guide to the selected queue manager's parameters on workspace <u>DWMQ</u> <u>Queue Manager Parameters</u>

• DWMQ Listener Status

Direct link to the workspace <u>DWMQ Queue Manager Listener Status</u>, limiting the output of listener status information to the selected queue manager

• DWMQ Dead Letter Queue Status for QMgr ...

Displays the Dead-Letter queue status summary for the selected queue manager, using the workspace <u>DWMQ Dead Letter Queue Status Summary</u>

• DWMQ Error Log Summary for QMgr ...

Link to the workspace <u>DWMQ Error Log Summary</u>, limiting the output to the selected queue manager context.

• DWMQ Queue Statistics Summary for QMgr ...

Link to the workspace <u>DWMQ Queue Statistics Summary</u>, limiting the output to the selected queue manager context.

• DWMQ Queue Definition Summary for QMgr ...

Link to the workspace <u>DWMQ Queue Definition Summary</u>, limiting the output to the selected queue manager context.

• DWMQ Channel Performance Summary for QMgr ...

Link to the workspace <u>DWMQ Channel Performance Summary</u>, limiting the output to the selected queue manager context.

• DWMQ Channel Definition Summary for QMgr ...

Link to the workspace <u>DWMQ Channel Definition Summary</u>, limiting the output to the selected queue manager context.

• DWMQ MQSeries Event Summary for QMgr ...

Link to the workspace <u>DWMQ MQSeries Event Summary</u>, limiting the output to the selected queue manager context.



• DWMQ Linux OS Agent

Link to the root navigator item of the Linux OS agent in the Physical ITM navigator for the hosting system.

The following thresholds apply to the table:





4.9.2 Workspace DWMQ Queue Manager Parameters

This workspace should only be used as a link target from another workspace. This workspace displays all available parameters for a selected queue manager.

Warning:

Navigating to this workspace directly, without required context information (Queue Manager Name) will lead to extensive CPU and network usage on the WebSphere MQ hosting system as well as on the entire ITM infrastructure, because definition details for all queue managers in the entire WebSphere MQ scope will be gathered, transferred and displayed.

The screen shot below shows sample data.

DWMQ Queue Manager Parameters - dw-vmitm01.home - itmuser - Administrator "ADMIN MODE"							
Elle Edit View Help							
⇔・⇔・ 🎦 🔚 🖼 🕫 🎠 🚸 🗟 🏭 🖸 🕮 🕛 Ο 🈂	di 🜗 🗐 🖬 🚳) 🖬 🖉 💽 😂 🛄 🖪 🗉	2 🖓 🝨 🖅 🗽 💽 🔥 🎫 🏄 😰		2		
🐔 Navigator 🌲 🗉 🖶 🛪	🛄 Queue Man	ager Parameters			✓ ¥ □ ⊟ □ ×		
💿 🎕 View: DWMQ WebSphere MQ Summary 💌 🕅	Parameter Name	Parameter Description	Parameter Value	Repository Namelist			
🚰 DWMQ WebSphere MQ Summary	OMNAME	MO manager name	MOW501 2				
- 📕 DWMO Channel Definition Summary	AUTHOREV	Authority events	Enabled				
DIMO Channel Performance Summany	CCSID	Coded character set ID	1208				
DVMC Cluster Queue Meneger Summer L	COMMANDQ	Command input queue name	SYSTEM. ADMIN. COMMAND. QUEUE				
Dwwo Cluster Queue Manager Summary	CMDLEVEL	Command level	700				
– 🎽 DWMQ Dead-Letter Queue Messages Summary	DEADQ	Dead letter queue name	SYSTEM. DEAD. LETTER. QUEUE				
– 🚰 DWMQ Error Log Summary	DESCR	Description					
🗕 📲 DWMQ MQSeries Events Summary	INHIBTEV	Inhibit events	Enabled				
- 🖪 DWMO Queue Definitions Summary	LUCALEV	Local error events	Enabled				
DWMO Queue Manager Status Summary	MAXHANUS	Maximum open nandles	4104204				
DVMAQ Queue Statistics Summer L	MAXMSGE	Maximum message length	4134504				
- E DWWQ Queue statistics summary	MAXUMSCS	Maximum uncommitted meas	10000				
	PEREMEV	Performance events	Enabled				
	PLATFORM	Architecture of platform	Linux				
	REMOTEEV	Remote error events	Enabled				
	STRSTPEV	Start and stop events	Enabled				
	SYNCPT	Syncpoint support	Available				
	TRIGINT	Trigger interval in ms.	999999999				
	DEFXMITQ	Default transmission Q					
	CHAD	Channel auto definition	Enabled				
	CHADEV	Channel auto definition events	Enabled				
	CHADEXIT	Channel auto definition exit					
	DISTL	Distribution lists	Yes				
	CLWLEXIT	Cluster workload exit					
	CLWLDATA	Cluster workload exit data					
	CLWLLEN	Cluster workload exit maximum	100				
	UMID	Internal queue manager name	MQW501_2_2009-07-23_16.22.10				
	REPOS	Repository cluster					
	SSLCRENI	SSL CRL nomelist					
	SSLKEYR	SSL key repository	/var/mam/amars/MOWS01_2/ssl/key				
🕰 Physical 🚜 DWMO WebSphere MO Summany	SSLCRYP	SSL crypto hardware	,,,,				
	ACCTCONO	A	Disalstat		<u> </u>		
🔲 Queue Manager Status					✓ ¥ Ш ⊟ ⊟ ×		
Origin Node OMgr Host OMgr Host Name Name Subsys Jobname	Start Date & Time	QMgr QMgr DLQ DL Status Type Depth Maxie	.Q Monitored Local Remote Alias Transmit Predefin mum Queues Queues Queues Queues Queues Queues	ed Dynamic S Perm Qs	Dynamic Open # Qs With % Qs With Temp Qs Queues High Depth High Dept		
MQWS01_2::MQ MQWS01_2 dw-vmwas01 08,	21/09 10:44:00	Active Linux 1 1	1024 46 35 3 1 4	35 0	0 30 0 0.0		
4					>		
(Ulub Time) 5rl 08/23/2000 02:08 BM	Con en	Aunitable	DWMO Quarte Menseer Devendence and united 01 house literati	on Administ			
- Hub Time: Fri, 08/21/2009 03:08 PM	Server	Available	DWMQ Queue Manager Parameters - dw-vmitm01.home - itmus	er – Administ	trator "ADMIN MODE"		

Illustration 22: Workspace DWMQ Queue Manager Parameters

The workspace splits up into two table views:

• Queue Manager Parameters

The table presents all available information on the selected queue manager

• Queue Manager Status

This table shows in a single row the detailed queue manager status summary for the selected queue manager.



The following thresholds apply to the table:



Both tables have no links defined.



4.9.3 Workspace DWMQ Queue Manager Listener Overview

The workspace displays the status of the listeners for all reporting queue managers.

📕 DWMQ Qu	eue Manager Li	steners Over	rview - d	w-vmitm01.	home -	itmuse	r - Admir	nistrato	r *ADMI	N MODE*									_ 6	X
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DWMQ Chan	el Berfermonce Sum	man	- MC	DWS02_1::MO	MOW502	2_1 dw-	-vmwas02			08/21/09 10	0:43:00	Active	Linux	0	1024	43	33	3	1	
- Bumo Clust	r Oueue Manader Si	imman/	🧠 MC	QWS02_2::MQ	MQW503	2_2 dw-	-vmwas02			08/21/09 10	0:43:00	Active	Linux	0	1024	43	33	3	1	
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S DWMO	WebSphere MO Su	mmany																		
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								_	_											<u> </u>
🛄 Listener Status																		/	₹ 01 ⊟	×□
Origin Node	▲ QMgr Name	Host Name		Listener Name		Status	Process Identifier	Date	Start e & Time	Transport Type	Listen Descrip	er tion	Start/Stop Control	p TCF Addi	PIP TCP ress Port	Concurre Reques	nt Conn t Count	SPX Socket	LU62 Tran Pgm Name	Net Local
■ MQWS01_1::N	Q MQW501_1	dw-vmwas01	SYSTEM.D	EFAULT LISTEN	ER.TCP	Running	5092	08/21/0	09 10:48:1	B TCP		Que	eue Manaj	ger *	1414	100		n/a		
MQWS01_2::N	Q MQW501_2	dw-vmwas01	SYSTEM.D	EFAULT.LISTEN	ER.TCP	Running	3780	08/21/	09 10:45:1	9 TCP		Que	eue Mana	ger *	1415	100		n/a		
MQWS02_1W	Q MQWS02_1	dw-vmwas02	SYSTEM D	FFAULT LISTEN	ER TCP	Running	3298	08/21/)9 10:43:21)9 10:43:21	D TCP		Que	eue Manaj eue Manaj	ger " ger *	1414	100		n/a n/a		
MQWSCL01::N	Q MQWSCL01	dw-vmwas01	SYSTEM.D	EFAULT LISTEN	ER.TCP	Running	3670	08/21/	09 10:45:1	3 TCP		Que	eue Mana	ger *	1416	100		n/a		
MQWSCL02::N	Q MQWSCL02	dw-vmwas02	SYSTEM.D	EFAULT.LISTEN	ER.TCP	Running	3326	08/21/	09 10:43:2:	1 TCP		Que	eue Mana	ger *	1416	100		n/a		
							•													-
	🕒 Hub Time: Fri, O	8/21/2009 03::	19 PM	💙 Sen	er Availat	ole		DWMQ Queue Manager Listeners Overview - dw-vmitm01.home - itmuser - Administrator *ADMIN MODE*												

Illustration 23: Workspace DWMQ Queue Manager Listeners Overview

The workspace is made up out of two table views:

• Reporting queue manager (Table View)

This table shows the status of all reporting queue managers. The following link has been defined:

III Reporting Queue Managers									
	Origin Node	QMgr Name	H N	lost ame	QMgr Subsys	Host Jobname	[
	MOW501 1~MO	MOWS01 1	dw-vn	nwas01			Γ		
G (a)	DWMO Limit To	Oueue Manade	r	nwas01			Г		
•				nwas02			Γ		
6 (6	∋ Link Wizard…			nwas02			Γ		

The link will recursively call this workspace, limiting the listener entries to the selected queue manager.





The following thresholds have been defined to the table view:

Listener Status

The table shows all existing listener for all reporting queue managers.

The provided link DWMQ Listener Process Watch will guide to the process table of the operating system agent workspace. This link is more experimental, and is supported on Linux systems only at this time.



4.10Navigator Item Queue Statistics Summary

This navigator item has five workspaces.



The default workspace is named "DWMQ Queue Statistics". The others are presenting more details on a specific queue and the current usage of the object.

4.10.1Workspace DWMQ Queue Statistics

The workspace gives a comprehensive overview of all queues from all reporting queue managers, unless a limitation to a specific queue manager and/or queue has been set by linking from another workspace.



Illustration 24: Workspace Queue Statistics



The workspace is a composition out of table views and bar charts:

Reporting queue manager (Table View)

This table shows the status of all reporting queue managers. The following link has been defined:

🔣 R	III Reporting Queue Managers									
	Origin Node	QMgr Name	H N	lost lame	QMgr Subsys	Host Jobname	[
	MOW501 1~MO	MOWS01 1	dw-vn	nwas01			ľ			
G (DWMQ Limit To	Queue Manage	er	hwas01			ľ			
•				nwas02			1			
6 0	🔊 Link Wizard			hwas02			ſ			

The link will recursively call this workspace again, limiting the queue entries to the selected queue manager.

The following thresholds have been defined to the table view:



• Queue Usage with Messages on Queue (Bar Chart)

Current queue depth usage in percent for all queues from all reporting queue managers with messages on the queue.

• Queue Opens with Messages on Queue (Bar Chart)

Number of Input and Output Opens per queue from reporting queue managers with messages on the queue

• Queue Statistics Summary (Table View)

The table reports detailed statistic information on all queues from all reporting queue managers.



The provided links help to analyze the queue usage and dependencies. The following links are defined for this table rows:



• DWMQ Queue Status

Link to the queue status workspace <u>DWMQ Queue Status</u> for the selected queue.

• DWMQ Channel Using This XmitQ

Displays the channel, which uses the selected transmission queue, in workspace <u>DWMQ</u> <u>Channel Performance Summary</u>

• DWMQ Queues Using This Queue As Target

References the workspace <u>DWMQ Queue Definition Summary</u> to display all remote queue definitions from all reporting queue managers, which point to the selected queue.

• DWMQ Triggered Queue Watch

Link to workspace DWMQ Triggered Queue Watch to display the used initiation queue.

• DWMQ Queue Referenced As Initiation Queue By ...

Link to the current workspace, limiting the selection of queues according to the queue definition, referencing the selected queue as the initiation queue for trigger processing.

• DWMQ Queue Messages

Displays the queue content, using the workspace DWMQ Queue Messages

The link availability depends on the queue usage.

All other remaining links are copies from the original product and reference workspaces in the product provided Physical View.





The following thresholds have been applied to this table:



4.10.2Workspace DWMQ Queue Status

This workspace will report the detailed status of a single queue.

Warning:

Navigating to this workspace directly, without required context information (Queue Name and Queue Manager Name) will lead to extensive CPU and network usage on the WebSphere MQ hosting system as well as on the entire ITM infrastructure, because status details for all queues in the entire WebSphere MQ scope will be gathered, transferred and displayed.

The screen shot below shows a sample for a queue status detail inspection.

-	WMQ Queue	Status - dw-vmitm01.ho	ne - itmuser	- Admin	istrator *	ADMIN MODE										
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8	View: DW	MQ WebSphere MQ Summary	▼ 245	Ori <u>c</u> Noc	gin de	Queue Name		QMgr Name	Uncommitte Msgs	d Current Ir Depth O	put Output pens Opens	Oldest S Msg Age Q	Short Term Queue Time	Long Term Queue Time	Last Get Date & Tin	Las ne Date
DWA 📲	MQ WebSphere M	1Q Summary		MQWS01.	2::MQ DWL	AB.MQDEMO.RING	APP.QLOCAL	MQW501_2	Yes	49	1 1	n/a n	i/a	n/a	n/a	n
- 2	DWMQ Channel P DWMO Channel P	erformance Summary														
- 🖷 i	DWMQ Cluster Qi	ueue Manager Summary														
- 🐴 (DWMQ Dead-Let	ter Queue Messages Summary	-										_			
	DWMQ Error Log	Summary Events Summany	4	•))
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Illustration 25: Workspace DWMQ Queue Status

The workspace displays a bunch of different metrics from various attribute groups, which makes it relatively resource consuming to display this information. It has six different views:

• Queue Status (Table View)

Displays the detailed status of the selected queue

• Number of Messages (Bar Chart)

Displays the number of messages on the selected queue compared to the max depth and the highest dept in interval.

Number of Opens (Bar Chart)

Number of Input and Output Opens against the selected queue



• Queue Statistics (Table View)

The table reports detailed statistic information for the queue.

The provided links help to analyze the queue usage and dependencies. The following links are defined for this table:

Que	ue Statistics					
	Origin Node	Page Set ID			Queue Name	
 œ	DWMQ Queue I	Definition D	etails	MQDEMO	.RINGAPP.QLO	ICA
œ	DWMQ Queue I	Messages				

• DWMQ Queue Definition Details

Link to the workspace <u>DWMQ Queue Definition Details</u> for the selected queue.

• DWMQ Queue Messages

Displays the queue content, using the workspace <u>DWMQ Queue Messages</u>.

The following thresholds have been applied to this table:



Queue Handle Status (Table View)
 Displays all open handles on the selected queue.



	III Queue Handle Status									
		Origin Node	Queue Name							
l		MOWED1 DUMO	DWI AD MODEMO RING ADD OLOGAL							
l	e	 DWMQ Operation 	System Process Details (Linux) AL							

The provided link will guide you to the process analyze workspace in the Physical Navigation Tree of the corresponding system. The link works for Linux platforms only.

The following thresholds have been set:

_	Open for Input EQ Shared
E E	
Ļ	Open for Input EQ Exclusive

Queue Definition Summary (Table View)

•

Displays the definition summary of the selected queue

The following link is defined for this table:

• DWMQ Queue Definition Details

Link to the workspace <u>DWMQ Queue Definition Details</u> for the selected queue.

The following thresholds have been set for this table:





4.10.3Workspace DWMQ Triggered Queue Watch

This workspace is displaying informations related to a selected triggered queue.

Warning:

Navigating to this workspace directly, without required context information (Queue Name and Queue Manager Name) will lead to extensive CPU and network usage on the WebSphere MQ hosting system as well as on the entire ITM infrastructure, because status details for all queues in the entire WebSphere MQ scope will be gathered, transferred and displayed.

This workspace should help to identify issues with the trigger configuration for the selected queue.

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- 🏙 DWMQ Cha	annel Performance Summary																				
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	eue Manager Status Summary)
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MQW501_2::MQ	DWLAB.MQDEMO.RINGAPP.QLOCAL	amgrmppa	QMGR	No	Yes	No	No	No	Inacti	mqm	3981	4		MQWSO	2_1.MQW9	501_2	192.168.0.3	2			
4))
	Hub Time: Mon. 08/24/200	9 03:41 PM		😧 Ser	ver Availal	ole		DWA	10 Triaa	ered Ou	eue Watch	n – dw-vn	nitm01	L.home -	- itmuser -	Admini	strator *ADM	IN MODE			

Illustration 26: Workspace Triggered Queue Watch

The workspace contains four table views:

Initiation Queue Status

Displays the detailed status of the referenced initiation queue.

Initiation Queue Handle Status

Displays the queue handles currently open for the referenced initiation queue.

Queue Statistics

Displays the detailed queue statistics for the selected queue.

• Queue Handle Status

Displays the queue handles currently open for the selected queue.

In each table the initiation queue name is highlighted.



4.10.4Workspace DWMQ Queue Messages

This workspace is displaying messages from a selected queue.

Warning:

Navigating to this workspace directly, without required context information (Queue Name and Queue Manager Name) will lead to extensive CPU and network usage on the WebSphere MQ hosting system as well as on the entire ITM infrastructure, because messages from all queues in the entire WebSphere MQ scope will be gathered, transferred and displayed.

DWMQ Queu	e Messages - dw-vmitm01.ho	ome - itmu	ser - A	dministra	tor *AD	MIN MO	ODE*										(
<u>F</u> ile <u>E</u> dit <u>V</u> iew <u>H</u> elp																		
🗢 • 🔿 • 🛅 🔛	🖽 🕫 XL 🚸 🗟 🏭 🔽 🕮 🛛	0 🖸 😂 🙆	s 🚯 I	🗉 🗞 🖬	🛛 🗹 🕿	3 🛄 🖪	1 💽	9 🔮 🗇	7 🔃 🖸 🖧	. 🗉 💋 💿								2
🝓 Navigator	\$	□ 🛛 ×	🛄 Mess	ages On Qu	eue											/ 3		- ×
📀 🦑 View: D	WMQ WebSphere MQ Summary	▼ 66		Message Tag	Msg Type	Msg Length	Expire (Secs)	Priority	Persistence	Segmented or Group Message	Backout Count	Appl Type	Appl ID	Put Dat	e & Time	Group ID	Status	
MQ WebSphere	MQ Summary		🙁 F6	5A9392B	Datagram	9680	Unlimited	0	Yes	No	0	UNIX	amqsput	08/24/09	9 15:34:22		OK	41.
📗 – 📲 DWMQ Channel	Definition Summary		🗢 B1	7234AFB	Datagram	9690	Unlimited	0	Yes	No	0	UNIX	amqsput	08/24/09	9 15:34:22		OK	414
📗 – 🚰 DWMQ Channel	Performance Summary		● 1	1108105	Datagram	9700	Unlimited	0	Yes	No	0	UNIX	amosput	08/24/09	9 15:34:22		OK	41
📗 – 📲 DWMQ Cluster (ueue Manager Summary		0 5	430822A	Datagram	9/10	Unlimited	0	Yes	NO	0	UNIX	amgsput	08/24/09	15:34:22		UK	41
- 👰 DWMO Dead-Le	tter Oueue Messages Summary		6	5428498	Datagram	9720	Unlimited	0	Vec	No	0	LIND	amgsput	08/24/05	3 15:24:22		OK	41
DIMO Error Los	Summany		a 31	FD6050D	Datagram	9740	Unlimited	0	Yes	No	0	LINIX	amosput	08/24/05	15:34:22		OK	41
	5	4		08DE1E5	Datagram	9750	Unlimited	Ň	Yes	No	-	LIND	amosput	08/24/09	15:34:22		OK	41.
DWMQ MQSerie:	Events Summary			4FFA8C0	Datagram	9760	Unlimited	ŏ	Yes	No	0	UNIX	amosput	08/24/09	15:34:22		OK	41
🛛 🗕 📲 DWMQ Queue D	efinitions Summary	-	🙁 ()	6DAFD7D	Datagram	9770	Unlimited	0	Yes	No	0	UNIX	amosput	08/24/09	15:34:22		OK	41.
📗 – 📲 DWMQ Queue M	anager Status Summary		21	C407679	Datagram	9780	Unlimited	0	Yes	No	0	UNIX	amgsput	08/24/09	15:34:22		ОК	41.
🗆 🖳 🚰 DWMQ Queue St	atistics Summary		7	5FF8AD5	Datagram	9790	Unlimited	0	Yes	No	0	UNIX	amgsput	08/24/09	15:34:22		OK	41.
			🙁 2·	41A4196	Datagram	9800	Unlimited	0	Yes	No	0	UNIX	amqsput	08/24/09	15:34:22		OK.	41
			0	59F8CAD	Datagram	9810	Unlimited	0	Yes	No	0	UNIX	amgsput	08/24/09	15:34:22		OK	41.
			8	60D810B	Datagram	9820	Unlimited	0	Yes	No	0	UNIX	amqsput	08/24/09	9 15:34:22		OK	41
			30 41	07DA2BA	Datagram	9830	Unlimited	0	Yes	No	0	UNIX	amqsput	08/24/09	3 15:34:22		OK	41.
			(2) 7	1ADC420	Datagram	9840	Unlimited	0	Yes	No	0	UNIX	amqsput	08/24/09	3 15:34:22		OK	41.
eg Physical eg D	WMQ WebSphere MQ Summary		4															•
Uqueue Statistics																/ ₹	008	• ×
Origin Node	Page Set A Queue		Queue Usage	Definitio Type	on Total Opens	Input Opens	Output Cur Opens E	r Opened kclusive	Current Hi Depth D	ghest High Dept epth Threshold	h % Full	Ret In Exceed	tvi Get led Status	Put Cur Status Def	r Trigger n Control	Trigger Ti Type D	rigger i lepth	Trigger Priorit∨
MQWS01_2::MQ	DWLAB.MQDEMO.RINGAPI	P.QLOCAL	Normal	Predefine	ed Z	1	1 n/a	ı	49	190 80	0 4.7	No	Ena	Ena Yes	Yes	First	1	Ó
			4															•
Uqueue Handle Status												-				/ 7	08	
Origin Node	Queue Name	Application Tag	Appl Type	Open for Input	Open for Output	Open for Browse	Open for (Inquire	Open for Set	Handle Status	r ID Process Th	ID ASI	D	Channe Name	21	Connection Name	n CICS Task I	i C No Tra	ICS Ins ID F
MQWS01_2::MQ MOWS01_2::MQ	DWLAB.MQDEMO.RINGAPP.QLOCAL DWLAB.MODEMO.RINGAPP.OLOCAL	amosget amormopa	USER	Shared	No I Yes I	10 10	No M	10	Inacti mq Inacti mg	m 6391 1 m 3981 4		MO	W502 1.MO	W501 2 1	92.168.0.3	2	_	
		4	1.2	1.02												-		
Dueue Definition Su	mmary															/ 3	mв	
Origin Node	Queue	Target Obj	ect/ Rem	note QM	1gr Clu	cter Clu	ster Clu	ster Q	ueue Quei	e Definition	C	reation	Cu	r Put	Default	Default		
MQW501_2::MQ	Name DWLAB. MQDEMO. RINGAPP. QLOCAL	Remote Qu	eue QM	igr Na MQWS	me 01_2	Nam	n/a	e Type 1	iype Usag ocal Norm:	e fype al Predefined	Dat 07/23/	e & Tin 09 16:	ne Det 24:08 Yes	Enabled	Priority 0	Yersist Yes Lo	cal Que	ue for th
•																		F
		3:59 PM		🙂 Server	Available			DWMC	Queue Mes	sages – dw-vmitn	n01.home	- itmu	ıser - Admir	nistrator *A		E*		
1																		_

Illustration 27: Workspace DWMQ Queue Messages

The workspace contains four table views:

Messages On Queue

Displays the current messages on the selected queue. On this level, only a few parameters from the message descriptor are displayed. The provided link will guide to message details:

• DWMQ Queue Message Details

The message descriptor and the message content will be displayed. Special authorities are required for this action.



• Queue Statistics (Table View)

The table reports detailed statistic information for the queue.

The provided links help to analyze the queue usage and dependencies. The following links are defined for this table:

Que	ue Statistics					
	Origin Node	Page Set ID			Queue Name	
 œ	DWMQ Queue I	Definition D	etails	MQDEMO	.RINGAPP.QLO	ICA
œ	DWMQ Queue I	Messages				

• DWMQ Queue Definition Details

Link to the workspace <u>DWMQ Queue Definition Details</u> for the selected queue.

• DWMQ Queue Messages

Displays the queue content, using the workspace <u>DWMQ Queue Messages</u>.

The following thresholds have been applied to this table:





Queue Handle Status (Table View) •

Displays all active open handles on the selected queue.

🛄 Q	ueue Handle Status		
	Origin Node	Queue Name	
	MOWER1 DUMO	DWI AD MODEMO BING ADD OLOGA	Ł
e	DWMQ Operation	System Process Details (Linux)	Ł

will guide you to the

The provided link process analyze workspace in the Physical Navigation Tree of the corresponding system. The link works for Linux platforms only.

The following thresholds have been set:



Queue Definition Summary (Table View)

•

Displays the definition summary of the selected queue

The following link is defined for this table:

DWMQ Queue Definition Details 0

Link to the workspace DWMQ Queue Definition Details for the selected queue.

The following thresholds have been set for this table:





4.10.5Workspace DWMQ Queue Message Details

This workspace displays the detailed message header and content. This workspace will only contain data , if a single message from the workspace DWMQ Queue Messages has been selected.

DWMQ Queu	ie Message Deta	uls - dw-vmitm01	.home - itmuser - Ad	ninistrator *ADMIN MODE*		_ 8 ×
<u>File Edit View H</u> elp						
🗢 - 🛸 - 🔀	🖽 📧 🎘 🚸 🕏	🖓 🔽 🕮 🛛 🖸) 🍪 🍈 🔍 🖬 🗞 🖬) 🖉 🖻 😂 🛄 🖪 🗉 🥘 🖓 🧐 🖉 🕼 🗐 🔥		5
📲 Navigator		\$ □	😑 🗴 🛄 Message Descr	iptor QueueName DWLAB.MQDEMO.CLUSSAMP.QLOCAL Q	MgrName: MQWSCL02 HostName: dw-vmwas02	✓ ¥ □ ⊟ □ ×
💿 🦑 🛛 View: 🛛	WMQ WebSphere M	Q Summary	Parameter Description	Parameter Value		
📲 DWMQ WebSphere	MQ Summary		Report	None: Defaults Used		*
- 🖪 DWMO Channe	Definition Summary		MsqType	Datagram		
- 🕺 DilMO Channel	Performance Summa	rv.	Expiry	Unlimited		
DIMO Cluster	Ouque Manager Summ	.,,	Feedback	None		
	Queue manager summ	ialy -	Encoding	546		
DWMQ Dead-L	etter Queue Messages	Summary	CodedCharSetId	1208		
🛛 🗕 🎬 DWMQ Error Lo	g Summary		Format	MQSTR		
📗 – 📲 DWMQ MQSerie	s Events Summary		Priority	0		
📗 – 📲 DWMQ Queue [Definitions Summary		Persistence Moold	TES 414DE1204DE1E7E22021EE2120202020244E88440	65.66930	
🛛 – 🖪 DWMO Oueue I	Anager Status Summa	arv	Corrolld	00000000000000000000000000000000000000	0000000	
	tatistics Summan		BackoutCount	0		
- Diming Queue	ranshes summary		ReplyToO	*		
			ReplyToQMgr	MQW501_1		
			Userldentifier	mam		
			AccountingToken	.1002		
			ApplidentityData			
			PutAppIType	UNDX		
			PutAppIName	amqsput		
P Distant (P -			PutDate	20090819		*
ee Physical ee L	WMQ WebSphere M	Q Summary	MsgTag: 562986	53 MsgId.: 414D51204D51575330315F3120202020	34AE8B4A06566820 CorrId.: 000000000000000000000000000	00000000000000000
🛄 Message Content	QueueName DWLAB.	IQDEMO.CLUSSAMP.QL	OCAL QMgrName: MQWSCL0	P HostName: dw-vmwas02		\checkmark \Rightarrow \square \square \square \times
Hexadeci	nal Data	Character Data	Converted Data			
4E616368 72696368 7	4203220 20202020	*Nachricht 2 *	*Nachricht 2 *			
20202020 20202020 2	0202020 20202020	* *	* * *			
20202020 202020		* *	* *			
	MsgTag	: 56298653 Msgld.:	414D51204D515753303	15F312020202034AE8B4A06566820 CorrId.: 000000	000000000000000000000000000000000000000	
	🕒 Hub Time: Mon,	08/24/2009 04:21 P	M 😯 Server A	vailable DWMQ Queue Message D	etails - dw-vmitm01.home - itmuser - Administrator *ADMIN MODE	P*

Illustration 28: Workspace DWMQ Queue Message Details

The workspace contains two table views:

Message Descriptor:

The detailed message descriptor with all available attributes

Message Content

The message content in hexadecimal data and character data representation

Both table frames display message identification data in the header and footer, to make the message identification possible.



5 Queries

All workspaces presented use queries to retrieve data from the agents. To enable the enhanced linking features most of the used queries were enhanced with additional parameters.

To make the solution more consistent and comprehensible all used queries are self-created. The queries have been inherited from the product provided ones.

5.1 Channel Definitions

The following queries have been added to the query dictionary of ITM for the attribute group channel definitions:

DW Channel Definitions

The query has been inherited from the product provided query Channel Definitions.

👇 🖙 Channel Data	Specif	ication					
Real-time Channel Definitions Real-time Cluster Queue Manager	Specifi	cation					
← ➡ Channel Definition Details	fx:						đ.
Channel Parameters Channel Definitions		🏂 Origin Node	🏂 Channel	🕫 Channel	∱x QMgr	fx	с
- PDW Channel Definitions	1	v	Type ✓	Name	Name		•
- 😨 DW Cluster Queue Manager Chant	2:	= = \$NODE\$!= ClusQmgr	== \$ChIName\$.	\$QMgrName\$		
- The Channel Definitions		•					

The parameter QmgrName has been added as a search argument. This enables querying for specific queue manager without setting the node. Once a node has been set, it can't be changed in sub-sequent searches.

• DW Cluster Queue Manager Channels

The Query has been inherited from Cluster Queue Manager Channels

<u>+</u>	₽	Channel Data		(Speci	ficat	ion								
0-		Channel Definition Details		H											
9		Channel Definitions		IĽ.	specii	icau	on								
	+	😨 DW Channel Definitions	•		fx										đ.
		👩 DW Cluster Queue Manager Channels		١ſ		6.	Origin Node	fr.	Channel	fr.	QMgr	fr	Cluster	fr.	CL
		😨 DW Cluster Summary				10	origin Nouc	10	Type	10	Name	10	QMgr	10	
		👩 Channel Definitions			1		V		V		V		V		
		😨 Cluster Queue Manager			2	= =	\$NODE\$	= = CI	lusQmgr	\$Q	MgrName\$				
		👩 Channel Definitions for Client Connectior		11	3										
		👩 Channel Definitions for Cluster Receiver			4										

The parameter QmgrName has been added as a search argument. This enables querying for specific queue manager without setting the node. Once a node has been set, it can't be changed in sub-sequent searches.



5.2 Channel Statistics

For this attribute group only one query has been added:

DW Channel Performance Query

The query is a copy of the product provided query Channel Performance Query.

•	🛏 🖬 Channel Long-Term Hi		Spec	ificat	tion							
9	🛏 🖬 Channel Short-Term Hi	١Ŀ	Space	ificati	on							
4	🛏 🖬 Channel Statistics 👘 💷	- 11	opec	incau	on							_
	- 🕤 DW Channel Perform		f×								đ	X
	– 😨 Channel Performanc			E.	Origin Node	💪 Channel	💪 Channel	🚓 Remote	💪 OMar	💪 XmitO	6	
	– 🛐 Channel Performanc			10	Origin Noue	Type	Name	🧖 Qmgr Name	Name	/* Name	14	
	– ᅙ Channel Performanc		1		V	V	V	∠	V	V	-	
	– 💿 Channel Performanc		2		\$NODE\$	= = \$ChannelType\$	= = \$ChannelName\$	= = \$RemoteQMgrName\$	= = \$QMgrName\$	== \$XmitQ_Name\$		
	– 💽 Channel Performanc		3									-
	🗕 🛐 Channel Performanc		4									•
4	🕨 🖬 Channel Status			4							•	
- 1												_

The following parameters have been added to the specification:

• RemoteQMgrName

This parameter enables the correlation between the destination and source queue manager.

• QmgrName

This parameter enables querying for specific queue manager without setting the node. Once a node has been set, it can't be changed in sub-sequent searches.

XmitQ_Name

By using this parameter, the correlation between channels and queues gets possible

5.3 Current Events

For this attribute group only one query has been added:

DW MQSeries Events

The query is a copy of the product provided query Mqseries Events Query.

← ➡ Channel Status		Speci	fication					
Connection Objects		-Specif	lication					
🔶 🖬 Current Events		Speci	ication					
- 💎 DW MQSeries Events	•	fx -						d e
– 😨 MQSeries Events			4. Origin Mode	A. Event	Event	A. Event	4. Execut	
🔶 🖬 Current Queue Manage			A Origin Noue	🖊 QMgr Name	Host Name	Date & Time	/x Event	'
🔶 🖬 Custom_SQL		1	v	v	v	~	~	
- Error Log		2	= = \$NODE\$	\$QMgrName\$	\$HostName\$			
- Event Details		3						
		4						

The following parameters have been added to the specification:

• QmgrName

This parameter enables querying for specific queue manager without setting the node. Once a node has been set, it can't be changed in sub-sequent searches.

• HostName



5.4 Error Log

For this attribute group only one query has been added:

DW Error Log

The query is a copy of the product provided query Error Log.

🕶 🖬 Current Queue Manage			Speci	fication							
Custom_SQL	=	_	Specif	fication						_	٦
P □ P Error Log OW Error Log		•	fx:							đ.	1
← 💽 Error Log ← 🖬 Event Details		_		🏂 Origin Node	🏂 QMgr Name	🏂 Host Name	🏂 Log Date & Time	fx	Message I	10	
🕶 🖬 Event History			1	2	V	v	v		V		11
🗣 🖬 Listener Status			2	= = \$NODE\$	\$QMgrName\$	\$HostName\$					
🖕 🖬 Log Data Set Status			4								
📥 🖬 I na Managar Long_Tar										-	

The following parameters have been added to the specification:

• QmgrName

This parameter enables querying for specific queue manager without setting the node. Once a node has been set, it can't be changed in sub-sequent searches.

• HostName

By using this parameter, the result may be limited to one specific host.

5.5 Listener Status

For this attribute group only one query has been added:

DW Listener Status

The query is a copy of the product provided query Listener Status.

- Leven Decano										
← 🖬 Event History			Speci	fication						
← ➡ Listener Status		_	Specif	ication						٦
DW Listener Status Distener Status	=	•	fx:						đ.	
🗠 🖬 Log Data Set Status				🚓 Origin	🔗 QMgr	& Host	🚓 Listener	& Status	6	
🔶 🖦 Log Manager Long-Ter				/~ Node	/* Name	🖍 Name	🧖 Name	Ja Status	10	11
🖕 🖬 Log Manager Short-Ter			1	~	~	v	2	~		
Manager Definition Det			2	== \$NODE\$	\$QMgrName\$	\$HostName\$				
🕶 🔲 Managers			3							
🔶 🖬 Messade Data										

The following parameters have been added to the specification:

• QmgrName

This parameter enables querying for specific queue manager without setting the node. Once a node has been set, it can't be changed in sub-sequent searches.

• HostName



5.6 Manager Definition Details

For this attribute group only one query has been added:

DW Queue Manager Parameters

The query is a copy of the product provided query Queue Manager Parameters.

► 📑 Event History	Specification	
	Specification 🖉	æ
 Log Manager Short-Term History Hanager Definition Details 	fx Origin fx QMgr fx Host Name fx Listene Name 1 V <	r 📘
OW Queue Manager Parameters Ow Queue Manager Parameters O Queue Manager System Log and Archive P Queue Manager System Parameters	2 == \$NODE\$ \$QMgrName\$ \$HostName\$ 3 4	

The following parameters have been added to the specification:

• QmgrName

This parameter enables querying for specific queue manager without setting the node. Once a node has been set, it can't be changed in sub-sequent searches.

• HostName



5.7 Managers

The following queries have been added to the query dictionary of ITM for the attribute group channel definitions:

- DW Channel Definitions Summary
 The query is a copy of the product provided query Channel Definitions Summary.
- DW Cluster Queue Manager The query is a copy of the product provided query Cluster Queue Manager.
- DW Dead-Letter Queues Summary The query is a copy of the product provided query Dead-Letter Queues Summary.
- DW Queue Definitions Summary
 The query is a copy of the product provided query Queue Definitions Summary.
- DW Queue Manager Status

The query is a copy of the product provided query Queue Manager Status.

For all specifications, the similar changes have been applied:



QmgrName

This parameter enables querying for specific queue manager without setting the node. Once a node has been set, it can't be changed in sub-sequent searches.

HostName



5.8 Message Data

For this attribute group only one query has been added:

DW Message Content

The query is a copy of the product provided query Message Content.

1	- Log manager phone renn motory													
0	Hanager Definition Details		Specification											
•	■ Managers –	Ì	Specification											٦
٩	Message Data	_	fx										đ	1
	OW Message Content Message Contents	•	🛱 Origin	ode	🖍 Queue	🏂 Message ID	윩 Correlation ID	fx Message	🏂 CMW Userid	∱ x QMgr	fx Host	∱ x Disp	fx +	
٠	🕒 Message Details		1		Name	-		Tay		Name	Name		-	
•	Hessage Manager Long-Term His	-	2 == \$NODE	(QueueName	\$MessageID\$	\$CorrelationID\$	\$MessageTag	\$encryptedLogon	\$QMgrName\$	\$HostName\$	<u> </u>		1
0-	🕒 Message Manager Short-Term Hi		3											
•	Message Statistics		4											

The following parameters have been added to the specification:

• QmgrName

This parameter enables querying for specific queue manager without setting the node. Once a node has been set, it can't be changed in sub-sequent searches.

• HostName

By using this parameter, the result may be limited to one specific host.

5.9 Message Details

For this attribute group only one query has been added:

DW Message Descriptor

The query is a copy of the product provided query Message Descriptor.

~ •	manager Dennition Details																				
م ا	Managers			Speci	ficati	ion															
م ا	Message Data		F	Specit	icatio	on			_											_	_
۹ 🕒	Message Details	_		fx		6															
	DW Message Descriptor			·					_		_				_						
	🧃 Message Descriptor	•	(fx	Origin Node	fx	Queue	fx	Message ID	fx	Correlation ID	fx	Message	fx	CMW Userid	fx QMgr	ß	Host	1	
è- 🗐	Message Manager Long-Term His	=	111.					Name						ray			Name		Name	4.	
				1		V		V		V		2		V			V		V		۱I.
~ ■	Message Manager Short-Term Hi			2	= = !	\$NODE\$	\$Qı	eueName		\$MessageID\$		CorrelationID\$	\$M	lessageTag	\$en	ryptedLogon	\$QMgrName	\$	HostName\$	5	1
• 🕒	Message Statistics			3																	
e 🕒	Message Summary			4																	
• 🖬	MQ Action Log																				

The following parameters have been added to the specification:

• QmgrName

This parameter enables querying for specific queue manager without setting the node. Once a node has been set, it can't be changed in sub-sequent searches.

• HostName



5.10Message Summary

The following queries have been added to the query dictionary of ITM for the attribute group channel definitions:

DW Dead-Letter Queue Messages

The query is a copy of the product provided query Dead-Letter Queue Messages.

∽ 🛏¶ Message Details ∽ 🖙 Message Manager Long-Term History		Specif	fication						
👇 🖬 Message Manager Short-Term History		Specif	ication						
🗢 🖬 Message Statistics		fx						[æ
👇 🖬 Message Summary		<i>1</i> ^{<i>n</i>}					1		<u>«</u>
DW Dead-Letter Queue Messages	•		🏂 Origin Node	🏂 CMW Userid	∲x Dest. QMgr	∱x QMgr Name	∱× Host Name	🏂 Dest. Queue	
DW Queue Messages	=	1	v		V	V	V) e i i
Dead-Letter Queue Messages		2	== \$NODE\$	\$encryptedLogon	=\$DestQMgr\$	\$QMgrName\$	\$HostName\$		
Queue Messages		3							
Queue Messages with DLQ Header		4							
r 🖛 MiQ Action Log									

The following parameters have been added to the specification:

• QmgrName

This parameter enables querying for specific queue manager without setting the node. Once a node has been set, it can't be changed in sub-sequent searches.

• HostName

By using this parameter, the result may be limited to one specific host.

DW Queue Messages

The query is a copy of the product provided query Queue Messages.

🗠 🛏 Message Details	_							
🗢 🖬 Message Manager Long-Term History	Spe	ecification						
🗢 🖬 Message Manager Short-Term History	Spe	ecification						
🗣 🖬 Message Statistics 🔤 🗌	fx	,						<u>6</u>
🔶 🖬 Message Summary	<i></i>							<u>«</u>
- 😨 DW Dead-Letter Queue Messages 🛛 🖣		🏂 🕅 Origin Node	🔊 Queue Name	🏂 CMW Userid	🖻 QMgr Name	∱ Host Name	🏂 Message Tag	
— 💿 DW Queue Messages 🔤 📃	1	1	V			K	∠ v	
— 🔽 Dead-Letter Queue Messages		2 == \$NODE\$	\$OueueName	\$encryntedl ogonl	\$OMarName\$	\$HostName\$		
— 👩 Queue Messages		2 \$14002\$	• Queuerramer	¢enerypreaeogon	¢Qngnadne¢	priostivanice		
🗕 🔄 Queue Messages with DLQ Header		4						
🖕 🖬 ΜΟ Action Log	-	4						- 111

The following parameters have been added to the specification:

• QmgrName

This parameter enables querying for specific queue manager without setting the node. Once a node has been set, it can't be changed in sub-sequent searches.

• HostName



5.11Queue Definition Details

For this attribute group only one query has been added:

• DW Queue Parameters

The query is a copy of the product provided query Queue Parameters.

-		Publish Subscribe Status Queue Accounting		-	SI	ipecifi	ecification										
-		Queue Data		4	_Sp	pecific	fication										
•		Queue Definition Details			f	fx							<u>€</u>				
	E	DW Queue Parameters Queue Parameters	_				🏂 Origin Node	∱ Queue Name	∱r QMgr Name	🏂 Cluster	∱r Host Name						
•		Queue Definitions				1	~	V	V	~	V	¥	_				
-		Queue Handle Status				2 =	== \$NODE\$	\$QueueName\$	\$QMgrName\$	== \$Cluster\$	\$HostName\$						
0		Queue Long Term History				3											
-		Queue Short Term History				4							- 11				
-		Queue Statistics															
-		Queue Status											-				
-		Subscription Definitions					4	III				•	·				
1	i mi	Subceription Status		111													

The following parameters have been added to the specification:

• QmgrName

This parameter enables querying for specific queue manager without setting the node. Once a node has been set, it can't be changed in sub-sequent searches.

• Cluster

By using this parameter, the result may be limited to one specific cluster.

• HostName



5.12Queue Definitions

For this attribute group only one query has been added:

DW Queue Definitions

The query is a copy of the product provided query Queue Definitions.

🔶 📑 Publish Subscribe Status		(a													
🖕 🖬 Queue Accounting	-	Spe	cification												
🔶 🖬 Queue Data	•	Spe	tification	ation											
🗢 🖬 Queue Definition Details		fx								đ					
👇 🖬 Queue Definitions			0.011.01	 Оцеце 	 Target Object (c Remote	e OMar	0 0 0	Cluster	<u> </u>					
- 🛜 DW Queue Definitions	=		px Origin Node	Name	Remote Queue	PX QMgr	Name Name	px Cluster	Namelist	†×					
– 👩 Queue Definitions		1	¥	v	2	V	2	V	¥						
– 🛐 Queue Definitions for Alias Queues		2	== \$NODE\$	\$QueueName	== \$TargetQueue\$	\$RemoteQMgr	\$QMgrName\$	== \$Cluster\$	\$ClusterNamelis						
— 7 Queue Definitions for Cluster Queues		3													
– 👩 Queue Definitions for Local Queues		4													
—			-												

The following parameters have been added to the specification:

• RemoteQMgr

This parameter enables the backward linking to a remote queue definition, using a selected target queue.

• TargetQueue

This parameter enables the backward linking to a remote queue definition, using a selected target queue.

• QMgrName

This parameter enables querying for specific queue manager without setting the node. Once a node has been set, it can't be changed in sub-sequent searches.

• Cluster

By using this parameter, the result may be limited to one specific cluster.

• ClusterNameList

By using this parameter, the result may be limited to one specific cluster group.

• HostName



5.13Queue Handle Status

For this attribute group only one query has been added:

DW Queue Handle Status

The query is a copy of the product provided query Queue Handle Status.

► ➡ Publish Subscribe Status ► ➡ Queue Accounting	_	Spec	cification											
🕶 🖬 Queue Data	4	Speci	fication											
🗠 🖬 Queue Definition Details		fx								<u>&</u>				
🗠 🖬 Queue Definitions			6. Origin Node	c. Oueue	 Target Object/ 	e. Remote	💪 OMar	4. Cluster	c. Cluster					
👇 🖬 Queue Handle Status	=		A Origin Noue	Name	Remote Queue	P QMgr	Name	pr cluster	Namelist					
— 🛐 DW Queue Handle Status		1	V	~	~	V	~	~	V					
🗕 📊 Queue Handle Status		2	== \$NODE\$	\$QueueName	= = \$TargetQueue\$	== \$RemoteQMgr\$.	\$QMgrName\$	== \$Cluster\$	\$ClusterNamelis					
👇 🖬 Queue Long Term History		3												
← 🕞 Queue Short Term History		4												

The following parameters have been added to the specification:

• RemoteQMgr

This parameter enables the backward linking to a remote queue definition, using a selected target queue.

• TargetQueue

This parameter enables the backward linking to a remote queue definition, using a selected target queue.

• QMgrName

This parameter enables querying for specific queue manager without setting the node. Once a node has been set, it can't be changed in sub-sequent searches.

• Cluster

By using this parameter, the result may be limited to one specific cluster.

• ClusterNameList

By using this parameter, the result may be limited to one specific cluster group.

• HostName



5.14Queue Statistics

For this attribute group only one query has been added:

DW Queue Statistics

The query is a copy of the product provided query Queue Statistics.

Queue Definition Detail Queue Definitions	(Specif	ication							
← 🖬 Queue Handle Status		Specif	ication							
🗢 🖬 Queue Long Term Histo	•	fx -								de la
🗣 🖬 Queue Short Term Hist			🏂 Origin Node	∱x Page Set	🕫 Queue	∱x QMgr	fx Process	fx Initiation	fx Host	1
P→ □ Queue Statistics		1		E E	Name	Name	Name	Queue Name	Name	
Provide a statistics → Provide Activity → Provi		2	== \$NODE\$	=\$PageSetID\$	\$QueueName	\$QMgrName\$	\$ProcessName	= = \$InitQName\$	\$HostName\$	
— 😨 Queue Statistics for (3								
– 👩 Queue Statistics for F		4							I	

The following parameters have been added to the specification:

• ProcessName

This parameter enables the linking from a selected process (for future use – not supported yet).

• InitQName

This parameter enables the backward linking to a queue, using a selected target queue as its initiation queue within the trigger processing.

• QMgrName

This parameter enables querying for specific queue manager without setting the node. Once a node has been set, it can't be changed in sub-sequent searches.

• HostName

By using this parameter, the result may be limited to one specific host.

5.15Queue Status

For this attribute group only one query has been added:

DW Queue Status

The query is a copy of the product provided query Queue Status.

Queue Short Term Histo	Speci	fication					
Queue Statistics Oueue Status	Specif	ication					
- 💎 DW Queue Status	fx						&
Queue Status Subscription Definitions		∱r Origin Node	🔊 Queue Name	∱x QMgr Name	∱× Host Name	fx:	U
←	1				V		
← 🕞 TCPIP Started Listeners	2	== \$NODE\$	\$QueueName	\$QMgrName\$	\$HostName\$		- 11
Topic Definitions	4						

The following parameters have been added to the specification:

• QMgrName

This parameter enables querying for specific queue manager without setting the node. Once a node has been set, it can't be changed in sub-sequent searches.

• HostName



6 ITM V6.2 Navigator Package Usage

6.1 Package Content – Delivered Files

• File ITMNavigator_V1.0.tar.gz This file contains a single XML file for import into the TEPS.

6.2 Implementing the Navigator

The situation advices have to be placed on the Tivoli Enterprise Portal Server (TEPS) system.

6.2.1 Prerequisites

The development of that solution ITM Software has been performed on ITM V6.2.1 IF 2. ITM version 6.2.1 or above is required.

To have situations attached to the new navigator, please implement the OPAL solution "OMEGAMON XE for Messaging, ITM Sample Situation Package"prior to implementing this solution. The sample situation package can be found at the following URL:

http://www-01.ibm.com/software/brandcatalog/portal/opal/details?catalog.label=1TW10OM1E

These sample situations are optional.

6.2.2 Loading the Navigator

The provided compressed tar file contains a single XML file. Extract this file to a directory of your choice on the TEPS system.

Loading the new navigator:

- On Unix/Linux/Windows:
 - \circ Login to TEPS, where the new navigator should get visible using the command <code>tacmdlogin</code>
 - Execute the command tacmd importnavigator with the required parameters.

Example:

tacmd importnavigator -x ITMNavigator_V1.0.xml -u itmuser -p "secret_password"





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