



## Release Notes

---

**Note:** Before using this information and the product it supports, read the information in “Notices” on page 20.

---

This edition applies to Version 1, Release 2, Modification IF0001 of IBM Tivoli Netcool Customer Experience Manager Module for MMS Service (Product Number 5724-V48) and to all subsequent releases and modifications until otherwise indicated in new editions.

© **Copyright International Business Machines Corporation 2010. All rights reserved.** US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

# Contents

<b>1</b>	<b>About this publication .....</b>	<b>1</b>
1.1	Intended audience .....	1
1.2	What this publication contains .....	1
1.3	Publications.....	2
	IBM Tivoli Netcool Service Quality Manager core library .....	2
	IBM Tivoli Netcool Customer Experience Manager Module for MMS Service library .....	3
	Prerequisite publications.....	4
	Related publications .....	4
	Accessing terminology online.....	4
	Accessing publications online .....	4
	Ordering publications.....	4
1.4	Tivoli technical training .....	5
1.5	Tivoli user groups.....	5
1.6	Support information .....	5
	Online 5	
	IBM Support Assistant .....	5
1.7	Conventions used in this guide .....	5
	Typeface conventions.....	6
	Operating system-dependent variables and paths.....	6
<b>2</b>	<b>Release details .....</b>	<b>7</b>
2.1	Software distribution contents.....	7
<b>3</b>	<b>Hardware specification.....</b>	<b>8</b>
<b>4</b>	<b>Software requirements .....</b>	<b>10</b>
<b>5</b>	<b>Installation .....</b>	<b>12</b>
5.1	Installation.....	12
5.2	Service module model version.....	12
5.3	Default resource mapping .....	13
<b>6</b>	<b>Known issues .....</b>	<b>14</b>
6.1	Metric Resource type is selectable for SLO instances which use MMS Service KPI metrics ...	14
6.1.1	Description.....	14
6.1.2	Impact.....	14
6.1.3	Resolution.....	14
<b>7</b>	<b>Fixed issues.....</b>	<b>16</b>
	<b>Appendix A: Product acronyms .....</b>	<b>18</b>
	<b>Notices .....</b>	<b>20</b>



# 1 About this publication

The *IBM Tivoli Netcool Customer Experience Manager Module for MMS Service Release Notes* provides information on IBM® Tivoli® Netcool® Customer Experience Manager Module for MMS Service version 1.2 IF0001 release contents, platform requirements, installation and upgrade procedures, and known issues.

## 1.1 Intended audience

This publication is for customers who use IBM® Tivoli Netcool Customer Experience Manager Module for MMS Service version 1.2 IF0001.

Readers need to be familiar with the following topics:

- Telecommunication and information technology (IT) principles
- IP networking
- Good understanding of UNIX® operating systems
- Multimedia messaging service (MMS)
- Tivoli Netcool Customer Experience Manager modeling concepts, such as service resources, key performance indicators (KPIs), key quality indicators (KQIs), service-level agreements (SLAs) and service-level objectives (SLOs).

## 1.2 What this publication contains

This publication contains the following chapters:

- Chapter 2 "Release details"  
Provides information on functionality provided in the release.
- Chapter 3 "Hardware specification"  
Provides details of hardware required for the release.
- Chapter 4 "Software requirements"  
Provides details of software required for the release.
- Chapter 5 "Installation"  
Provides details of which guides to follow during installation.
- Chapter 6 "Known issues"  
Provides details of known issues included in the release and workarounds, if available.

- Chapter 7 "Fixed issues"  
Provides details of fixed issues included in the release.

This publication contains the following appendix:

- Appendix A "Product acronyms"  
Provides a description of product acronyms used in this guide.

## 1.3 Publications

This section lists the following publications:

- IBM Tivoli Netcool Service Quality Manager core library
- IBM Tivoli Netcool Customer Experience Manager Module for MMS Service library

It also describes how to access Tivoli publications online and how to order Tivoli publications.

### IBM Tivoli Netcool Service Quality Manager core library

- *IBM Tivoli Netcool Service Quality Manager AIX Server Installation Guide, GC23-9847-00*  
Describes how to install the Tivoli Netcool Service Quality Manager Server system on IBM AIX®.
- *IBM Tivoli Netcool Service Quality Manager Solaris Server Installation Guide, GC23-9846-00*  
Describes how to install the Tivoli Netcool Service Quality Manager Server system on Solaris.
- *IBM Tivoli Netcool Service Quality Manager Client Installation Guide, GC23-9850-00*  
Describes how to install the Tivoli Netcool Service Quality Manager client.
- *IBM Tivoli Netcool Service Quality Manager Upgrade Guide, SC23-9842-00*  
Details how to upgrade from one Tivoli Netcool Service Quality Manager version to another.
- *IBM Tivoli Netcool Service Quality Manager AIX System Administration Guide, SC23-9845-00*  
Provides an overview of the IBM AIX® Tivoli Netcool Service Quality Manager administrative tasks including instructions on how to complete the following tasks:
  - Starting and stopping Tivoli Netcool Service Quality Manager.
  - Running batch processes such as archiving trace files and log files.
  - Backing up and restoring the system.
- *IBM Tivoli Netcool Service Quality Manager Solaris System Administration Guide, SC23-9844-00*  
Provides an overview of the Solaris Tivoli Netcool Service Quality Manager administrative tasks including instructions on how to complete the following tasks:
  - Starting and stopping Tivoli Netcool Service Quality Manager.
  - Running batch processes such as archiving trace files and log files.
  - Backing up and restoring the system.
- *IBM Tivoli Netcool Service Quality Manager Provisioning Service SI Guide, SC23-9852-00*

Reference guide containing information for provisioning the Tivoli Netcool Service Quality Manager system.

- *IBM Tivoli Netcool Service Quality Manager Customer Experience Manager Provisioning Guide, SC23-9843-00*

Provides information for provisioning the Tivoli Netcool Customer Experience Manager system.

- *IBM Tivoli Netcool Service Quality Manager Customer Experience Manager Monitoring Guide, SC23-9482-00*

Describes how to use and monitor the Tivoli Netcool Customer Experience Manager feature in Tivoli Netcool Service Quality Manager.

- *IBM Tivoli Netcool Service Quality Manager Monitoring Guide, SC23-9103-01*

Describes monitoring (Service level agreement (SLA) monitor, Key quality indicator (KQI) analyzer, alarm monitor, audit manager and SLA Webview applications) in Tivoli Netcool Service Quality Manager.

- *IBM Tivoli Netcool Service Quality Manager Configuration Guide, SC23-9102-01*

Describes SLA provisioning (parties, SLAs, and SLA templates applications) and Tivoli Netcool Service Quality Manager provisioning (services resources, KQI models, and service models applications) in Tivoli Netcool Service Quality Manager.

- *IBM Tivoli Netcool Service Quality Manager Business Objects Installation and Configuration Guide, SC23-9473-00*

Provides information on the steps required to install and configure the BusinessObjects server and client for use with Tivoli Netcool Service Quality Manager.

- *IBM Tivoli Netcool Customer Experience Manager Customer Relationship Management Development Guide, SC23-9857-00*

Provides an overview of how to write some Java™ code to connect to a customer relationship management system with the Tivoli Netcool Customer Experience Manager product.

- *IBM Tivoli Netcool Service Quality Manager Release Notes, G111-9221-00*

Provides information on the Tivoli Netcool Service Quality Manager release contents, platform requirements, installation and upgrade procedures, and known issues.

### **IBM Tivoli Netcool Customer Experience Manager Module for MMS Service library**

- *IBM Tivoli Netcool Customer Experience Manager Module for MMS Service Installation Guide*

Provides the steps required to install the Tivoli Netcool Customer Experience Manager Module for MMS Service and its data sources.

- *IBM Tivoli Netcool Customer Experience Manager Module for MMS Service Overview Guide*

Provides an overview of the Tivoli Netcool Customer Experience Manager Module for MMS Service product architecture.

- *IBM Tivoli Netcool Customer Experience Manager Module for MMS Service Interface Control Guide*

Provides details of the Tivoli Netcool Customer Experience Manager Module for MMS Service input interface.

- *IBM Tivoli Netcool Customer Experience Manager Module for MMS Service Release Notes*

Provides information on the Tivoli Netcool Customer Experience Manager Module for MMS Service release contents, platform requirements, installation procedures, and known issues.

## Prerequisite publications

To use the information in this publication effectively, you must have some prerequisite knowledge, which you can obtain from the following publications:

- *IBM Tivoli Netcool Customer Experience Manager Module for MMS Service Overview Guide*

Provides an overview of the Tivoli Netcool Customer Experience Manager Module for MMS Service product architecture.

- *IBM Tivoli Netcool Customer Experience Manager Module for MMS Service Installation Guide*

Provides the steps required to install the Tivoli Netcool Customer Experience Manager Module for MMS Service and its data sources.

## Related publications

The following document also provides useful information:

- *IBM Tivoli Netcool Customer Experience Manager Module for MMS Service Interface Control Guide*

Provides details of the Tivoli Netcool Customer Experience Manager Module for MMS Service input interface.

## Accessing terminology online

The IBM Terminology Web site consolidates the terminology from IBM product libraries in one convenient location. You can access the Terminology Web site at the following Web address:

<http://www.ibm.com/software/globalization/terminology>

## Accessing publications online

The product CD contains the publications that are in the product library. The format of the publications is PDF.

IBM posts publications for this and all other Tivoli products, as they become available and whenever they are updated, to the Tivoli Documentation Central Web site at <http://www.ibm.com/tivoli/documentation>.

---

**Note:** If you print PDF documents on other than letter-sized paper, set the option in the **File -> Print** window that allows Adobe® Reader to print letter-sized pages on your local paper.

---

## Ordering publications

You can order many Tivoli publications online at

<http://www.elink.ibm.link.ibm.com/publications/servlet/pbi.wss>.

You can also order by telephone by calling one of these numbers:

- In the United States: 800-879-2755



- In Canada: 800-426-4968

In other countries, contact your software account representative to order Tivoli publications. To locate the telephone number of your local representative, perform the following steps:

1. Go to <http://www.elink.ibm.link.ibm.com/publications/servlet/pbi.wss>.
2. Select your country from the list and click **Go**.
3. Click **About this site** in the main panel to see an information page that includes the telephone number of your local representative.

## 1.4 Tivoli technical training

For Tivoli technical training information, refer to the following IBM Tivoli Education Web site at:

<http://www.ibm.com/software/tivoli/education>

## 1.5 Tivoli user groups

Tivoli user groups are independent, user-run membership organizations that provide Tivoli users with information to assist them in the implementation of Tivoli Software solutions. Through these groups, members can share information and learn from the knowledge and experience of other Tivoli users. Tivoli user groups include the following members and groups:

- 23,000+ members
- 144+ groups

Access the link for the Tivoli Users Group at [www.tivoli-ug.org](http://www.tivoli-ug.org).

## 1.6 Support information

If you have a problem with your IBM software, you want to resolve it quickly. IBM provides the following ways for you to obtain the support you need:

### Online

Access the Tivoli Software Support site at <http://www.ibm.com/software/sysmgmt/products/support/index.html?ibmprd=tivman>.

Access the IBM Software Support site at <http://www.ibm.com/software/support/probsub.html>.

### IBM Support Assistant

The IBM Support Assistant is a free local software serviceability workbench that helps you resolve questions and problems with IBM software products. The Support Assistant provides quick access to support-related information and serviceability tools for problem determination. To install the Support Assistant software, go to: <http://www.ibm.com/software/support/isa>

## 1.7 Conventions used in this guide

This publication uses several conventions for special terms and actions, operating system-dependent commands and paths, and margin graphics.

## Typeface conventions

This publication uses the following typeface conventions:

### Bold

- Lowercase commands and mixed case commands that are otherwise difficult to distinguish from surrounding text.
- Interface controls (check boxes, push buttons, radio buttons, spin buttons, fields, folders, icons, list boxes, items inside list boxes, multicolumn lists, containers, menu choices, menu names, tabs, property sheets), labels (such as **Tip:** and **Operating system considerations:**)
- Keywords and parameters in text.

### Italics

- Citations (examples: titles of publications, diskettes, and CDs)
- Words defined in text (example: a nonswitched line is called a *point-to-point line*)
- Emphasis of words and letters (words as words example: "Use the word *that* to introduce a restrictive clause."; letters as letters example: "The LUN address must start with the letter *L*.")
- New terms in text (except in a definition list): a *view* is a frame in a workspace that contains data.
- Variables and values you must provide (example: ...where *myname* represents...)

### Monospace

- Examples and code examples.
- File names, programming keywords, and other elements that are difficult to distinguish from surrounding text.
- Message text and prompts addressed to the user.
- Text that the user must type.
- Values for arguments or command options.

## Operating system-dependent variables and paths

This publication uses the UNIX convention for specifying environment variables and for directory notation. When using the Windows® command line, replace *\$variable* with *% variable%* for environment variables and replace each forward slash (/) with a backslash (\) in directory paths. The names of environment variables are not always the same in the Windows and UNIX environments. For example, *%TEMP%* in Windows environments is equivalent to *\$TMPDIR* in UNIX environments.

---

**Note:** If you are using the bash shell on a Windows system, you can use the UNIX conventions.

---

## 2 Release details

**Note:** Sample data provided with this service module uses sample manufacturer, device and people names for the data attached. The data associated with these names is selected at random by the development team as sample data. It does not represent any real world view of any product.

IBM Tivoli Netcool Customer Experience Manager Module for MMS Service provides the following data sources:

- Multimedia messaging service call data recorder (MMS\_CDR)

### 2.1 Software distribution contents

**Table 1: Description of software distribution contents**

<i>Filename or guide title</i>	<i>Description</i>
ibm-tn-cem-cem_mms_gom-SCMMS1.2.0.5.tar.gz	Installation package for Tivoli Netcool Customer Experience Manager Module for MMS Service version 1.2 IF0001 Global Object Model.
ibm-tn-cem-cem_mms_cdr-SCMMS1.2.0.5.tar.gz	Installation package for Tivoli Netcool Customer Experience Manager Module for MMS Service version 1.2 IF0001.
cem_mms_readme.txt	Installation instructions for the demonstration package for Tivoli Netcool Customer Experience Manager Module for MMS Service.
<i>Tivoli Netcool Customer Experience Manager Module for MMS Service version 1.2 IF0001 Installation Guide</i>	Details the steps required to install the Tivoli Netcool Customer Experience Manager Module for MMS Service version 1.2 IF0001.
<i>Tivoli Netcool Customer Experience Manager Module for MMS Service version 1.2 IF0001 Release Notes</i>	Provides information on the Tivoli Netcool Customer Experience Manager Module for MMS Service release contents, platform requirements, installation and upgrade procedures, and known issues.

## 3 Hardware specification

---

**Note:** Refer to the *Tivoli Netcool Manager Version 4.1.2 Server Installation Guides* for the minimum hardware required to operate this product.

---



## 4 Software requirements

The minimum pre-requisite software requirements are:

- Tivoli Netcool Service Quality Manager version 4.1.2
- Global Object Model (GOM) 1.6 or higher



## 5 Installation

### 5.1 Installation

To install the Tivoli Netcool Customer Experience Manager Module for MMS Service, refer to the *Tivoli Netcool Customer Experience Manager Module for MMS Service version 1.2 IF0001 Installation Guide*.

---

**Note:** The *Tivoli Netcool Customer Experience Manager Module for MMS Service version 1.2 IF0001 Installation Guide* supercedes the *Tivoli Netcool Customer Experience Manager Module for MMS Service Installation Guide*. The *Tivoli Netcool Customer Experience Manager Module for MMS Service Installation Guide* is not to be used when installing this service module.

Please also note that version 1.2 IF0001 cannot be installed if version 1.2 has already been installed. To install version 1.2 IF0001, version 1.2 must first be uninstalled, then the *Tivoli Netcool Customer Experience Manager Module for MMS Service version 1.2 IF0001 Installation Guide* must be followed.

---

The installation procedure requires 2 software distributions of the Customer Experience Manager Module for MMS Service module :

- Tivoli Netcool Customer Experience Manager for MMS Service module version 1.2, available to download from Xtreme Leverage
- Tivoli Netcool Customer Experience Manager for MMS Service module version 1.2 IF0001 (this release)

### 5.2 Service module model version

---

**Note:** The *Tivoli Netcool Customer Experience Manager Module for MMS Service Installation Guide* requires the person installing the software to input the service module name, data source name and model version of this service module.

---

The service module name, data source name(s) and model version of this service module are as follows:

- Module name = mms
  - Data source name = cdr
-



- Model version = 1.2

### 5.3 Default resource mapping

Tivoli Netcool Customer Experience Manager Module for MMS Service supports Tivoli Netcool Service Quality Manager "default resource" instances. These are provided so that data with the following characteristics can be processed and stored by the service module:

- Any data row which contains resource type references that cannot be recognized against the provisioned resource set
- Any data row that has missing references to one or more resource types

In each of these cases the reference will be attributed to the "default resource" instance of that resource type. For example if the resource type is "Enterprise" then the default resource for that resource type is named "unknown\_Enterprise". To all other intents and purposes the default resource can be treated the same as any other instance of the resource type. The service module produces key performance indicator (KPI) values for the default resource and these can be monitored for diagnostic purposes if required.

If a customer does not wish to have any default resource **metrics** created, the default resource **instances** can be safely deleted via the Tivoli Netcool Service Quality Manager user interface or via the provisioning broker. Any data rows matching the characteristics detailed above are subsequently not included in any KPI metrics.

## 6 Known issues

### 6.1 Metric Resource type is selectable for SLO instances which use MMS Service KPI metrics

#### 6.1.1 Description

When creating an SLO, the user selects a set of Resource Types on which the metric will be monitored. The selection control presents the Metric type as an option but this is invalid. The Metric type should not be selectable in this view.

#### 6.1.2 Impact

If the user attempts to create and activate an SLO instance where the Metric, the operation will not succeed and an error message will be displayed. The user must back-track through the wizard to remove the Metric type from the definition

#### 6.1.3 Resolution

This problem will only be seen on a Tivoli Netcool Customer Experience Manager server running version 4.1.2 with Fix Pack 00001 (4.1.2-TIV-TNCEM-FP0001). The issue is resolved if the server version is updated to version 4.1.3



## 7 Fixed issues

There are no fixed issues.



## Appendix A: Product acronyms

Table 2: Description of product acronyms

<i>Acronym</i>	<i>Description</i>
AIX	Advanced Interactive Executive
CDR	Call Data Recorder
CR	Change Request
GOM	Global Object Model
IP	Internet Protocol
IT	Information Technology
KPI	Key Performance Indicator
KQI	Key Quality Indicator
MMS	Multimedia Messaging Service
SLA	Service-Level Agreement
SLO	Service-Level Objective



## Notices

IBM may not offer the products, services, or features discussed in this document in all countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing  
IBM Corporation  
North Castle Drive  
Armonk NY 10504-1785  
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

IBM World Trade Asia Corporation  
Licensing  
2-31 Roppongi 3-chome  
Minato-ku  
Tokyo 106-0032  
Japan.

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.



Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation  
5300 Cork Airport Business Park  
Kinsale Road  
Cork  
Ireland.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

### **Trademarks**

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at “Copyright and trademark information” at [www.ibm.com/legal/copytrade.shtml](http://www.ibm.com/legal/copytrade.shtml).

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Java and all Java-based trademarks and logos are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.



Other company, product or service names may be trademarks or service marks of others.

IBM®

Printed in the Republic of Ireland.