Communicate

MTM version 5.0 User Guide

2011.04.07

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1. About Message Tracking Monitor, MTM

MTM is a tool for monitoring and tracking messages in a BizTalk application. Its purpose is to:

Show all messages inbound and outbound with

- o Sender
- \circ Receiver
- o Time
- Messagetype
- Messageld
- o State

MTM has a database where this information is stored. Both the inbound and the outbound files are stored in this database.

We have developed pipeline components that are to be used in BizTalk pipelines in order to gather the information into the MTM database. These components communicate with MTM using MSMQ and SOA to transfer the data. The users of the system decide how long the messages should be saved in the database.

Other functions

You have the possibility to search for message specific data in MTM. You can have multiple criteria per messagetype. These are defined in the Admin user interface. MTM has an integration with BizTalk and it is possible to resume or terminate messages with status "Suspended"

2. Installation

This section describes a new installation of MTM and upgrading from version 4.0 to version 5.0.

2.1 Prerequisites

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Server:

- o Microsoft .NET 2.0 Framework
- o Microsoft .NET 3.5 Framework
- o Microsoft .NET 3.5 SP1
- o Microsoft SQL Server 2005 or higher.
 - o Full text search must be installed
 - o Mixed mode authentication must be enabled
 - o Remote connections must be enabled
- MSMQ (Microsoft Message Queuing)
 - Internet Information Server 6 or higher
 - If using IIS 7.0, the IIS 6 Management compatibility must be installed.
 - If using IIS 7.0, 32 bit applications must be enabled on the application pool defaults.
 - If using IIS 6.0 in 64 bits mode, 32 bit version must be enabled (<u>http://support.microsoft.com/kb/894435</u>)
- o ASP .NET 2.0 installed on the Internet Information Server.
 - If using IIS 6.0 in 64 bits mode, the ASP.NET 2.0 32 bits must be installed and ASP.NET version 2.0.50727 (32-bit) is set to Allowed in the Web service extension list in Internet Information Services Manager (<u>http://support.microsoft.com/kb/894435</u>)
- o Microsoft Report Viewer Redistributable 2010
- To use Database job functionality see <u>Prerequisites and setup for</u> <u>database jobs</u>

Client:

o Internet Explorer 7 or higher

2.2 Installing MTM 5.0

All installations of MTM features are initiated through running "Message Tracking Monitor 5.0 Setup.exe". During installation, you are given an option of doing a complete installation or a custom installation. A custom installation lets you choose what features to install.

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The features are as follows:



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Web

Contains all the MTM components hosted in IIS

Front end

Front end web for searching through and performing actions on logged messages as well as doing administrative tasks.

Services

Web services used by the MTM windows service and the MTM web for interacting with the MTM database.

BizTalk service

Web service used by the MTM windows service and the MTM web for interacting with BizTalk.

Windows service

The MTM windows service is responsible for processing logged messages from the MTM MSMQ as well as handling suspended, terminated and dehydrated events from BizTalk.

BizTalk components

Core MTM components used by the pipelines and MTM windows service to log and process messages from BizTalk.

Pipelines

Standard pipelines supplied with MTM. Includes an xml receive, pass through receive and application receipt pipelines.

Documentation

Documentation for MTM.

Log viewer

Log viewer for viewing MTM error logs.

Database setup

Database setup packages for installing and upgrading MTM databases and MTM archival databases.

For a single server installation, a complete install is recommended. For a distributed installation, you run the installation on all individual servers and do a custom install on each to install only the features you want to run on that server. An example of such an install can be seen in section 2.2.1 below.

2.2.1 Example of a distributed installation scenario

The following scenario is an example of how to install MTM in a distributed environment of serves.

We have a dedicated web server where we intend to host all the web components. We have a second server for Microsoft BizTalk and SQL.

We'll start by making a user who is a member of the BizTalk administrators and Enterprise SSO groups. This user will be needed at a later time.

- 1. **On the web server**, we'll install all the web parts (front end web, MTM services and MTM BizTalk service). We'll also install the documentation for sake of convenience and the log viewer so that we can view any errors occurring in the web and services with ease.
- 2. Configure the MTM services according to section 2.2.4 so it knows how to interact with the MTM database.
- 3. Configure the MTM BizTalk service according to section 2.2.5 so it knows how to interact with BizTalk.
- 4. If MTM services and BizTalk service are installed on a different server, you will need to configure the references to MTM services and BizTalk service in the MTM web (section 2.2.6). If they are installed on the same server this will work by default without configuration.
- 5. Install the MTM license key in accordance with section 2.2.7.
- 6. **On the other server**, we'll install everything <u>except</u> the web components, again using the installation package.
- 7. We'll then start by creating the database and the database users by following 2.2.2.
- 8. Next, we need a Microsoft Message Queue to write log objects to and from. We'll do this by following 2.2.3. In this case, we'll install the MSMQ on the same machine as the BizTalk installation and SQL server installation. For added transactional safety, this can be placed on a third separate server.

The pipelines which log using the MTM pipeline components log to this MSMQ, using the featured MTM BizTalk Components. The windows service which is responsible for taking these entries and inserting them into the database also makes use of the MTM BizTalk Components.

9. The pipelines and windows service have to know where and how to log, so we will configure BizTalk components according to 2.2.8 so that it

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points to our recently created queue and point to the machine where the MTM services are installed.

- 10. We'll need to setup the windows service to run with a user who has sufficient privileges to interact with BizTalk. We previously created a user with proper group membership so we'll follow 2.2.10 to configure the windows service to run with this user.
- 11. Finally, we will install the MTM pipelines according to 2.2.9.

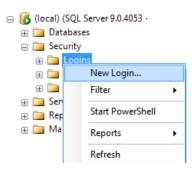
Our installation is now complete and any traffic going through an MTM pipeline is now logged.

2.2.2 Creating database

 Start the database setup by clicking [Start > All Programs > Communicate BizTalk Tools > Message Tracking Monitor > Database > Create database]. This will show the following user interface

| 📑 Run Package | | × |
|-------------------|---|-------------------|
| | vill create a new data r and database you v | |
| Select Databas | e | More <u>I</u> nfo |
| <u>S</u> erver | local | • |
| | <u>W</u>indows auth SQL Server <u>a</u>uth | |
| <u>U</u> ser name | | |
| <u>P</u> assword | | |
| C Upg | grade an existing da | tabase |
| | ke a database | Ad <u>v</u> anced |
| <u>D</u> atabase | МТМ | |
| | <u>R</u> un | Cancel |

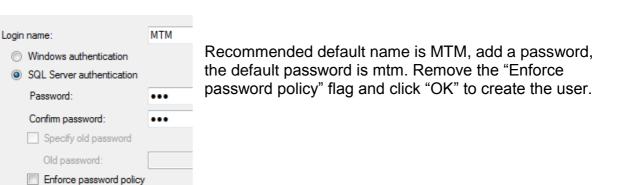
- 2. Select a server and supply credentials for a user with sufficient privileges to create a database
- 3. Enter a database name and press [Run]. Wait while the database is created
- 4. Create a login at server level for MTM on the database server.



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 Create a user at database level based on the created server login. Give this user the db_owner membership. Click "OK" to save this user.

| User name: Login name: Certificate name: | MTM MTM |
|--|------------|
| Database role membership: Role Members | |
| db_datawriter db_ddladmin db_denydatareader db_denydatawriter | |
| db_owner db_securityadmin | |

| i 间 MTM | |
|-----------------|----------|
| 🕀 🚞 Database 🛙 | Diagrams |
| 🕀 🚞 Tables | |
| 🕀 🚞 Views | |
| 🗄 🚞 Synonyms | |
| 🕀 🚞 Programm | ability |
| 🗉 🚞 Service Bro | oker |
| 🗉 🚞 Storage | |
| 😑 🚞 Security | |
| 🖃 🚞 Users | |
| | New User |
| - E | Filter 🕨 |
| B . (| |

- 2. As stated in the prerequisites, make sure the server authentication type on the database server is set to "SQL Server and Windows Authentication Mode". This is accessed through right-clicking the SQL server and choosing properties. The setting is found under the security page. Make sure that the "Allow remote connections to this server" is checked, this is found under the "Connections" page
- 3. The database is now ready for use

2.2.3 Microsoft Message Queuing

- Install MSMQ through Start Control Panel Add/Remove Programs Add/Remove Windows Components – Application Server – Message Queuing
- Create a private queue through Computer Management Services And Applications – Message Queuing – Private Queues. Rightclick "Private Queues" and choose New – Private Queue. The default name used in the configuration file is : msmqueue.
- 3. Set sufficient rights on the queue right click on the queue select "Properties" and the "Security" tab. Add the "BizTalk Server Administrators" group and give

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this user "Full Control" permission on the queue. Add the "Biztalk Application Users" group and give this group "send" permission on the queue.

4. The message queue is now ready for use by MTM

2.2.4 Configure MTM services

 Edit the configuration settings so that MTM services knows how to connect to the MTM database. The configuration file is opened through Start > All Programs > Communicate BizTalk Tools > Message Tracking Monitor > Configuration > Services config

```
<connectionStrings>
<add name="NTMConnection" connectionString="Data Source=localhost;Initial Catalog=MTM;
Persist Security Info=True;User ID=MTM;Password=mtm" providerName="System.Data.SqlClient"/>
</connectionStrings>
```

- Find and modify the part above to fit your configuration. Data Source = server Initial Catalog = database name User id = username for the MTM database Password = password for the MTM database user
- 3. MTM services are now ready for use

2.2.5 Configure MTM BizTalk service

1. Edit the configuration settings so that MTM BizTalk service knows how to connect to BizTalk. The configuration file is opened through [Start > All Programs > Communicate BizTalk Tools > Message Tracking Monitor > Configuration > BizTalk service config]

```
<identity impersonate="true" userName="domain\username"
password="password"/>
```

2. Find and change the line above to a valid user/password. It is recommended that this user is included in the BizTalk administrators group.

<add name="BTConnection" connectionString="Integrated Security=SSPI; Server=localhost; Database=BizTalkMgmtDb"/>

- 3. Find and verify the above line to make sure the server property is correct
- 4. MTM BizTalk service is now ready for use



2.2.6 Configuring MTM web

1. Edit the configuration settings so that the MTM web knows how to connect to MTM services and MTM BizTalk service. This is only necessary as part of a distributed install where MTM web and MTM Services are installed on different machines. The configuration file is opened through [Start > All Programs > Communicate BizTalk Tools > Message Tracking Monitor > Configuration > web config]

| <add< td=""><td><pre>key="MessageTypeServiceProxy.MessageTypeService" value="http://localhost/MTMServices/MessageTypeService.asmx"/></pre></td></add<> | <pre>key="MessageTypeServiceProxy.MessageTypeService" value="http://localhost/MTMServices/MessageTypeService.asmx"/></pre> |
|--|--|
| <add< td=""><td><pre>key="MessagePartnerServiceProxy.MessagePartnerService" value="http://localhost/MTMServices/MessagePartnerService.asmx"/></pre></td></add<> | <pre>key="MessagePartnerServiceProxy.MessagePartnerService" value="http://localhost/MTMServices/MessagePartnerService.asmx"/></pre> |
| <add< td=""><td><pre>key="MessageServiceProxy.MessageService" value="http://localhost/WTMServices/MessageService.asmx"/></pre></td></add<> | <pre>key="MessageServiceProxy.MessageService" value="http://localhost/WTMServices/MessageService.asmx"/></pre> |
| <add< td=""><td><pre>key="UserServiceProxy.UserService" value="http://localhost/MTMServices/UserService.asmx"/></pre></td></add<> | <pre>key="UserServiceProxy.UserService" value="http://localhost/MTMServices/UserService.asmx"/></pre> |
| <add< td=""><td><pre>key="StatisticsServiceProxy.StatisticsService" value="http://localhost/NTMServices/StatisticsService.asmx"/></pre></td></add<> | <pre>key="StatisticsServiceProxy.StatisticsService" value="http://localhost/NTMServices/StatisticsService.asmx"/></pre> |
| <add< td=""><td><pre>key="SearchFieldProxy.SearchFieldsWrapperService" value="http://localhost/MTMServices/SearchFieldsWrapperService.asmx"/></pre></td></add<> | <pre>key="SearchFieldProxy.SearchFieldsWrapperService" value="http://localhost/MTMServices/SearchFieldsWrapperService.asmx"/></pre> |
| <add< td=""><td><pre>key="BiztalkManagerServiceProxy.BiztalkManagerService" value="http://localhost/WTMBiztalkService/BiztalkManagerService.asmx"/></pre></td></add<> | <pre>key="BiztalkManagerServiceProxy.BiztalkManagerService" value="http://localhost/WTMBiztalkService/BiztalkManagerService.asmx"/></pre> |
| | |

2. Find the lines above and change the server "localhost" or the path MTM services \ MTM BizTalk service as needed

2.2.7 Enter license key

- Edit the license file and fill out your license information. The license file can be reached through [Start > All Programs > Communicate BizTalk Tools > Message Tracking Monitor > Configuration > License file]
- 2. Restart Internet Information Services (IIS)
- 3. MTM web is now ready for use

2.2.8 Configuring BizTalk components

 Open the MTM configuration file by clicking [Start > All Programs > Communicate BizTalk Tools > Message Tracking Monitor > Configuration > MTM config]

<MessageTypeService url="http://localhost/MTMServices/MessageTypeService.asmx"/>
<MessagePartnerService url="http://localhost/MTMServices/MessagePartnerService.asmx"/>
<MessageService url="http://localhost/MTMServices/MessageService.asmx"/>

2. Find and modify the above lines to conform to your server \ install path configuration. This needs to be changed if the MTM services reside on a different machine than where the BizTalk components are installed.

<MSMQueue value=".\private\$\msmqueue"/>

- 3. Find and modify the above lines to conform to the message queue you created in section 2.2.3, or use default.
- 4. BizTalk components is now ready for use





- Run the setup for the MTM pipelines by clicking [Start > All Programs > Communicate BizTalk Tools > Message Tracking Monitor > Pipelines > Pipelines setup]
- 2. Setup for MTM pipelines will start. Follow instructions on screen to complete installation
- 3. To import the MSI into BizTalk, we recommend that you create dedicated a BizTalk application to host the pipelines.
- 4. After creating the application, right-click it and press Import Msi File. Follow the wizard to finish importing the pipeline.
- 5. Add a reference to this application from the applications that you intend to use the pipelines from.
- 6. The pipelines are now ready for use.

2.2.10 Configuring MTM windows service

- 1. Go to the services pane through service
- Start the MTM Windows Service through Start Control Panel Administrative Tools – Services
- 3. Right click MTM Service 5.0, click properties and go to the "Log On" tab. Change the user to a user that is included in the BizTalk administrators group and the Enterprise SSO Administrators group.
- 4. Start the MTM Windows Service.
- 5. If you run multiple servers, repeat step 1 through 4 on each of them

2.3 Upgrading from MTM 4.0 to 5.0

It is recommended to stop all message traffic using MTM in BizTalk while the upgrade is in progress. To make the install go as cleanly as possible, we recommend fully uninstalling MTM web, MTM services, MTM BizTalk service, MTM BizTalk components and the MTM windows service before starting to install version 5.0.

Taking a backup of the web.config of MTM web, MTM services and MTM BizTalk service as well as c:\mtm\mtm30.config is recommended if there have been changes made to these files.

You can then follow the installation guide section 2.2 and use a custom install to install the newer versions of the components you've uninstalled.

Upgrading the database is covered in section 2.3.1.

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2.3.1 Database

- 1. Backup existing MTM database.
- 2. Start the database upgrade setup by clicking [Start > All Programs > Communicate BizTalk Tools > Message Tracking Monitor > Database > Upgrade 4.0 database]. This will show the following user interface

| B | Run Package | |
|---|-------------------|--|
| | | ill upgrade an existing database. Please and database you would like to |
| | -Select Database | More Info |
| | <u>S</u> erver | localhost 🗸 |
| | | ○ <u>W</u> indows authentication |
| | | SQL Server <u>a</u> uthentication |
| | <u>U</u> ser name | sa |
| | <u>P</u> assword | ***** |
| | • Upg | grade an existing database |
| | C <u>M</u> ak | e a database Ad <u>v</u> anced |
| | <u>D</u> atabase | MTM |
| | | Run <u>C</u> ancel |

- 3. Select a server and supply credentials for a user with sufficient privileges to update the database
- 4. Make sure no traffic will try to access the MTM database while the upgrade is performed.
- 5. Choose the database to upgrade and press [Run]. Wait while the database is updated
- 6. The MTM database is now updated to 5.0

3. How to use MTM

3.1 Login

MTM is a web based solution. You have to enter a username and a password to get access.





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| Enter cr | edentials | |
|-----------|-----------|---------|
| Username: | | |
| Password: | | |
| | Remen | nber me |
| | 🗌 Use Al |) user |
| | | Login |

The login supports both "Remember me" and Active Directory (AD) integration and these functions are configurable (turn on/off) from web config file.

```
<add key="UseAD" value="true" /> <add key="AllowRememberMe" value="true" />
```

- **Remember me**: If this is checked when logging in the user will be automatically logged inn at next visit.
- Active Directory: If the AD user is registered in MTM or member of an AD group registered in MTM the user will be automatically logged inn. The first time a user logs inn based on a AD group the user will be automatically created in the system.

If both AD and "Remember me" are used at the same time the "Remember me" functionality will get priority.

For user and group administration see MTM Admin.

3.1.1 Settings for AD

The MTM web must disable anonymous authentication to use AD login. Add the user or group in the admin module as DOMAIN\Username or DOMAIN\Group. See the section 5.1 for more information.

3.2 MTM Main

| Search | Message | e actions | | | | | Total n | umber of re | cords | : 76 |
|--------------------------------|---------|---------------------|--------------------|---------|------------------|--------------|--------------|-------------|-------|------|
| Message details () | MTM Id | Document Id | Message type | Time | | Sender | Receiver | Status | | |
| Period Period | 4477 | | Receipt | 09.03 | 2011 15:28:04 | Default | Default | Success | | E |
| 29.03.2010 00:00 | 4478 | | Overseas order | 09.03 | 2011 15:33:02 | Sender | Mottaker | Error | | |
| 29.03.2011 23:59 | 4479 | | Overseas order | 09.03 | 2011 15:33:33 | Sender | Mottaker | Error | | |
| earch in files Search in files | 4480 | Bjarne_60 | Overseas order | 09.03 | 2011 15:34:09 | Sender | Mottaker | Running | E | |
| | 4481 | | Receipt | 09.03 | 2011 15:34:26 | Default | Default | Success | | |
| dvanced search () | 4482 | Bjarne_61 | Overseas order | 09.03 | 2011 15:35:37 | Sender | Mottaker | Running | | |
| | 4483 | | Receipt | 09.03 | 2011 15:35:45 | Default | Default | Success | | |
| Search Reset | 4484 | Bjarne_62 | Overseas order | 09.03. | 2011 15:38:06 | Sender | Mottaker | Success | | [|
| | 4485 | | Receipt | 09.03 | 2011 15:38:32 | Default | Default | Success | | |
| | 4486 | Bjarne_63 | Overseas order | 09.03 | 2011 15:47:24 | Sender | Mottaker | Success | | |
| | 4487 | | Receipt | 09.03 | 2011 15:48:12 | Default | Default | Success | | |
| | 1 2 3 | 3 4 5 6 7 8 9 | 10 | | | | | | | |
| | Details | for message 4484 | | | | | Defa | ult 💌 UTF | -8 | |
| | Log Id | Time | Description | Status | File name | | | Receiver | Dire | ctio |
| | 14688 | 09.03.2011 15:38:06 | Received message | Running | InFileTest.xml | | | Mottaker | 4 | - |
| | 14689 | 09.03.2011 15:38:06 | Message identified | ок | | | | Mottaker | | |
| | 14690 | 09.03.2011 15:38:06 | Processing send | Success | c3ade585-3d83-49 | 3e-85db-d7aa | 893dcd6a.xml | Default | - | • |
| | 14692 | 09.03.2011 15:38:32 | Received messages | Success | Correlation.xml | | | Default | | |

MTM is divided into 4 main sections:

- 1. Search area to the left
- 2. Header area on the top
- 3. Messages middle right
- 4. Message log bottom right.
- 5. Footer area.



The search area has 3 levels of detailed views to search for messages:

| Search | Search | Search |
|--------------------|----------------------|----------------------------|
| Message details () | Message details () | Message details () |
| Period | Document ID | |
| 01.03.2010 00:00 | | Document ID |
| 16.03.2010 23:59 | | Choose sender 👻 |
| Search in files | | Choose receiver - |
| | Choose status | Choose status 👻 |
| Advanced search () | Choose messagetype 👻 | Prøvesvar 👻 |
| | Period | Period |
| Search Reset | 01.03.2010 00:00 | 16.03.2010 00:00 |
| | 16.03.2010 23:59 | |
| | Search in files | 16.03.2010 23:59 |
| | | Search in files |
| | Advanced search () | |
| | | Advanced search () |
| | Search Reset | Choose Stored Search - |
| | | Save current search |
| | | Name of search |
| | | User defined field search: |
| | | Choose field - |
| | | Value |
| | | Elements in list: 10 |
| | | Search Reset |

In the simplest version of the search area (fully collapsed), you can define two search parameters; 'Period' and 'Search in files'.

The default period is today and search in files gives the user possibility to search for any word or phrase in the file.

If the "Message Details" is expanded you can also define parameters for

- o Document ID
- \circ Sender
- \circ Receiver
- Status
- Message Type

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Document ID is a user defined field in the message. The "Message Type", "Sender" and "Receiver" search filters are defined in the Admin module.

When the "Advanced search" is expanded you can define parameters for User defined field search. This area is only visible if the selected message type has user defined fields. These fields are defined in the Admin module, to make it possible to search for content at predefined XPath locations in the messages. These values are optimized in the database for fast search. The advanced search area also provides the possibility to save or use a previous saved search. MTM displays all messages found based on the search criteria's."Elements in list" sets the number of messages shown in the message list. The default number is read from web config

<add key="ElementsInList" value="10" />.

It is possible to turn off the visibility of the search in files ability. This is controlled through the web.config of the website and will affect all users regardless of access level. This configuration setting is controlled by the following segment.

<add key="ShowFreeTextSearch" value="true"/>

Valid values for the value segment is "true" and "false".

3.2.1.1 Saving a search

By checking the "save current search" checkbox, you will be able to give this search a name and it will be saved when clicking the search button. All parameters except the dates will be saved. To use a stored search choose from the stored search dropdown box on the top of the "Advanced search" area.

3.2.1.2 User defined search with AND/OR

It is possible to turn off the visibility of the user defined search. This is controlled through the web.config of the website and will affect all users regardless of access level. This configuration setting is controlled by the following segment.

<add key="UserDefinedSearch" value="true"/>

Valid values for the value segment is "true" and "false".

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| Search | | | | |
|----------------------|-------------------|--|--|--|
| Message details () | | | | |
| Document ID |) | | | |
| MTM ID | | | | |
| Choose send | ler 💌 | | | |
| Choose rece | iver 💌 | | | |
| Choose stat | us 🔻 | | | |
| Prøvesvar | - | | | |
| Period | | | | |
| 01.02.2011 | 00:00 | | | |
| 01.02.2011 | 23:59 | | | |
| Search in file | s Search in files | | | |
| | | | | |
| Advanced sea | arch () | | | |
| Choose Stored Search | | | | |
| 🔲 Save curre | nt search | | | |
| Name of sea | rch | | | |
| User defined | field search: | | | |
| to | • | | | |
| Partner B | Add | | | |
| And/Or: | ◉ And ◎ Or | | | |
| Search field | Value | | | |
| from | Partner A Delete | | | |
| to | Partner B Delete | | | |
| Elements in lis | st: 10 | | | |
| Search | Reset | | | |

3.2.2 Header area

The header area provides a simple and easy menu and current user information.

The links:

1. Reports, opens the reports form



2. Admin, opens the admin form

The user menu:

| Current user: MTMAdmin 🗸 | | | |
|--------------------------|---------------|--|--|
| | User settings | | |
| 01 | Documentation | | |
| | Log out | | |

1. User settings

Open a form where the user is able to set what columns to show in the "Message area" and how many elements to show as default in the message list result. These settings are saved in a cookie for the current user.

- Documentation
 Opens the MTM documentation as a PDF file.
 Loss out
- 3. Log out Logs current user out of MTM

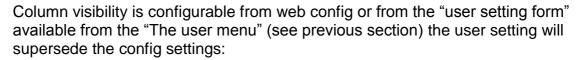
3.2.3 Message area

This area lists all the messages, according to the search parameters given in the search area. The list default shows the MTM Id, Message type, Time (when processing started), sender, receiver and the status for the message. By clicking a row you will get the log information for the message. This information is shown in the Message Log area

| MTM Id | Document Id | Message type | Time | Sender | Receiver | Status | |
|--------|-------------|--------------|---------------------|--------------|-----------|---------|--|
| 136 | | Prøvesvar | 11.03.2010 14:15:02 | Default | Default | Success | |
| 135 | | Prøvesvar | 11.03.2010 14:15:00 | Default | Default | Success | |
| 134 | | Prøvesvar | 09.03.2010 15:58:02 | Default | Default | Success | |
| 132 | | Epikrise | 09.03.2010 12:47:11 | Legekontor A | Sykehus B | Success | |
| 133 | | Epikrise | 09.03.2010 12:47:11 | tester | Sykehus B | Success | |
| 131 | | Epikrise | 09.03.2010 12:47:11 | Legekontor A | Sykehus B | Success | |
| 130 | | Epikrise | 09.03.2010 12:47:11 | Legekontor A | Sykehus B | Success | |
| 129 | | Epikrise | 09.03.2010 12:47:11 | Legekontor A | Sykehus B | Success | |
| 128 | | Epikrise | 09.03.2010 12:32:37 | Legekontor A | Sykehus B | ок | |
| 127 | | Epikrise | 09.03.2010 12:26:38 | Legekontor A | Sykehus B | Running | |



www.



```
<add key="ColumnMTMIdVisibility" value="true" />
<add key="ColumnDocumentIdVisibility" value="true" />
<add key="ColumnMessageTypeVisibility" value="true" />
<add key="ColumnProcessedVisibility" value="true" />
<add key="ColumnSenderVisibility" value="true" />
<add key="ColumnReceiverVisibility" value="true" />
<add key="ColumnReceiverVisibility" value="true" />
```



The checkbox at the end of each message is used to mark one or more messages, the check box in the header will toggle checks inn all visible messages. The user needs the correct level of access rights to perform some of the actions. Setting up these rights is described in the MTM-Admin section.

Following actions is available for a message and is triggered by the "Message Action button" top left:

- Resume, triggers the resume action in BizTalk. Require the status "Suspended" to perform this action and Resume/Terminate access rights.
- Resend, will resend the message in BizTalk. Resend is only supported if file port is used in BizTalk.
- o Add comment, adds a comment, see Add comment.
- Terminate, triggers the terminate action in BizTalk. Require the status "Suspended" and Resume/Terminate access rights
- Delete, marks the message as delete and it will not be shown in the message area. Require Administrator access rights.
- Change status, changes status on all selected messages.

3.2.3.1 Add Comment

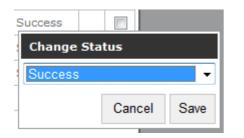


Add comment message action opens a small form to create or add a new comment to the selected message(s).

All messages having one or more comments are marked with an icon, E. By clicking this icon all comments connected to this message are shown and new comments can be added.

| Com | ments |
|-----------|--|
| | test 010 19:54:25 by NICATE\pharseth |
| | |
| Add new d | comment: |
| | <u>^</u> |
| | + |
| Save | Cancel |

3.2.3.2 Change message status



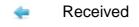
A message can have following statuses; Running, OK, Resumed, Terminated, Error, Success, Suspended (resumable), Suspended (not resumable). By clicking the status field on a message you can change the current status by choosing from the dropdown.

3.2.4 Message Log area

| .og Id | Time | Description | Status | File name | Receiver | Direction |
|--------|---------------------|--------------------|---------|--|-----------|-----------|
| 341 | 09.03.2010 12:47:11 | Received message | Running | dokument.xml - Copy.xml | Default | - |
| 342 | 09.03.2010 12:47:11 | Message identified | ок | | Sykehus B | |
| 347 | 09.03.2010 12:47:15 | Processing send | Success | f30d5750-ba52-4f2b-b713-685fe9df36c4.xml | Default | ٠ |
| 350 | 09.03.2010 12:47:18 | Processing send | Success | f30d5750-ba52-4f2b-b713-685fe9df36c4.xml | Default | - |



This area shows a list with logging information for selected message. The list shows the log id, time, description, status, file name, receiver and direction. The direction is based on if the message is received or sent, and the arrows indicate as follows:



🧼 Sent

In the details area you have the possibility to see both the inbound and the outbound message by clicking the filename link. The dropdown boxes at the top are used to show the message with correct format or style and encoding.

The style is customized XSLT style sheets that are added in the admin module and connected to a message type.

3.2.5 Footer area



3.2.5.1 License message

In the right footer area there will be shown a warning message when the license is expiring in less than 30 days.

3.2.5.2 Site label

It is possible to add a site label that is displayed on all pages. The text on this label is defined in web.config. If this setting exists and the value is not empty, this label is displayed on all pages, including the login page. To add a site label, add a value to this key in the web.config file: <!-- Site Label --> <add key="SiteLabel" value="Site label value"/>

4. Reporting / statistics

The purpose of the reporting module is to offer reports that will give the end user information about the message flow, to reveal problems in an early state and show the server load on the applications.

| lessage Tracking Monitor | Main Ad | dmin | MTMAdmin [Log out] |
|---|--|---|--------------------|
| Report: Message Types System name: All | Selection:Grouping: | All Message type: A Month Suspended: | I 🔽 |

4.1 Predefined reports

The reporting module comes with four predefined reports:

- o Message types
- Throughput statistics
- Processing statistics
- Processing statistics details

4.1.1 Message Types

This report gives an overall messages count and error count based on message type.

4.1.2 Throughput Statistics

This report gives a overall throughput statistics information. Gives the key values on;

number of interchanges, total received size, max received size, max received type, min received size, min received type, total sent size, max sent size, max sent type, min sent size and min sent type. The results are given in counted number or in size bytes (B) or kilo bytes (KB).

4.1.3 **Processing Statistics**

This report gives a line chart overview on; shortest processing time, longest processing time, average processing time and number of interchanges.

4.1.4 **Processing Statistics Details**

This report presents the details based on the processing statistics. This includes the MTM Message id for the shortest and longest processing times.





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4.2 Filters

 \circ Selection

Time filter; last 24 hours, last 7 days, last month or custom. When selecting the custom selection two textboxes from/to gets visible for custom dates selection.

• Message Type

Filters the report by all or selected message type. Message types are set up in the admin module and described in this section.

o System Name

Filters the report by all or selected System name. The System name is a property set on the pipeline component MTMXMLReceive and AppRecMTMReceive.

Grouping

Groups the report based on hour, day, week, and month.

 \circ Suspend

Toggle to show the suspended messages or not.

A matrix defining filter available on reports:

| Report / Filter | S | Messa | Syste | G | S |
|-----------------|---|-------|-------|---|---|
| Message Types | Х | | | | |
| Throughput | Х | Х | Х | | |
| Processing | Х | Х | Х | Х | Х |
| Processing | Х | Х | Х | Х | Х |

4.3 Custom reports using Reporting Services

The custom reporting module gives the users the possibility to design and use custom reports created and published to the reporting server.

4.3.1 Prerequisites

Reporting Services have to be installed and configured.

The MTM application pool in the IIS have to be run by a user that have rights to the folders where the MTM reports and the datasources are stored on the reportserver.



4.3.2 **Settings**

In the web config file the following settings needs to be set:

| ReportServerURL | The URL to the Reporting server e.g. http://Servername/ReportServer/ |
|---------------------------|---|
| ReportServerWebServiceURL | The URL to the Reporting server web service e.g. http://Servername/ReportServer/ReportService2005.asmx |
| ReportServerFolder | The Reporting server folder where the custom reports are located e.g. MTMReports |

4.3.3 Creating and deploying the reports.

This topic will not be discussed in dept. The user needs to have the necessary skill to create and deploy a report using the Report builder or another tool like the Visual Studio. All reports deployed to the folder corresponding to the ReportServerFolder in 4.3.2 will be accessible through the MTM reports UI.

4.3.4 User interface

The MTM will only show a dropdown list showing all the available reports. When selecting a report a report viewer will show you the report exactly as it was created.





5. MTM Admin

MTM is delivered with an Admin module to maintain:

- o Users
- o User groups
- o Message partners
- Message types
- User defined fields
- Message correlation (through user defined fields)
- o Stored searches
- Message type access rights
- o Message partner access rights
- Style sheets
- o User actions
- Database jobs
- o Shows when license is expiring

| Admin | Users | Message types | Partners | Stylesheets | User actions | Database jobs | Defined fields | Miscellaneous | | | | |
|-------------|--|--------------------|-----------------|-----------------|-----------------|----------------|----------------|---------------|----------------|--|--|--|
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Welcome to | o the adminis | stration module. | | | | | | | | | | |
| You can ad | You can administer various aspects of Message Tracking Monitor from this module. | | | | | | | | | | | |
| | | | | 5 | | | | | | | | |
| Users | - Create and maintain users and groups. | | | | | | | | | | | |
| Message t | Message types - Create and maintain messages types. Setting up message lookups like receiver etc. is also done here. | | | | | | | | | | | |
| Access rig | hts - M | aintain access rig | hts message | types, differer | nt receivers et | с. | | | | | | |
| Stylesheet | s -Up | load and maintai | n stylesheets | for easier view | wing of xml me | ssages. | | | | | | |
| User action | ns - Le | ts you view acti | ons performed | by the users | in the web. | | | | | | | |
| Database j | obs - Ad | lminister databas | e jobs for cle | aning and arch | niving message | logs. | | | | | | |
| Defined fie | lds - Ad | lminister user det | fined lookup fi | elds for messa | ges. Used for | increased sear | ch performanc | e and message | e correlation. | | | |
| Stored sea | rch - Ad | dminister stored s | earches. | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Your license is expiring in 175 days.

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5.1 Users and user groups

To define a new user, click Users > Create User

Fill out the desired data and assign appropriate group membership. A user must have be a member of at least one group.

A new user will have the same password as his username until his first logon, where he is asked to change it.

| Admin | Users | Message types | Partners | Stylesheets | User actions | Database jobs |
|----------------|---------------------------|---------------|-------------|-------------|--------------|---------------|
| All users Crea | ate user 🕴 Gi | roups | | | | |
| | | | | | | |
| User name:* | • | | | V A | ctive | |
| First name: | | | | A | dministrator | |
| Last name: | | | | | | |
| Email addres | ss: | | | | | |
| Valid until: | | | | | | |
| * = required | | | | | | |
| Not member | of | | Member of | f | | |
| | ATE\Solutio ATE\Halden | ns 🗉 | >> Everyone | | | |
| | | | | | Save | 9 |

To administer groups, click Users > Groups

| Admin | sers Message types Partners Stylesheets User actions Database jobs Defined fields Misc | ellaneous |
|------------------|--|--------------|
| l users Create (| ser Groups | |
| | | |
| | Group name | Admin |
| Edit Delete | Everyone | |
| Edit Delete | Administrators | \checkmark |
| Edit Delete | COMMUNICATE\Solutions | |
| Edit Delete | COMMUNICATE\Halden | |
| Edit Delete | TestGroup1 | |
| Edit Delete | TestGroup2 | |
| Insert Cancel | | |



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5.2 Message Partners

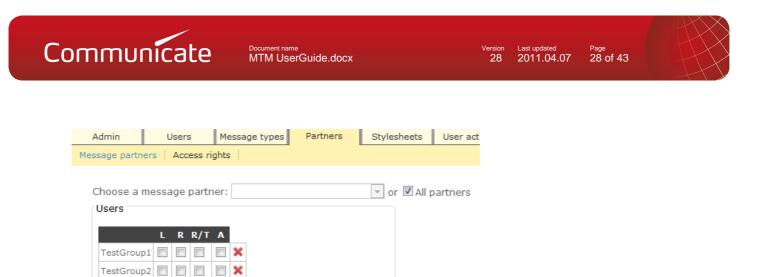
All senders and receivers are defined at Partners > Message partners. Message Partners are defined automatically when sent through MTM pipeline components. By default, both the message partner id and message partner name fields are equal. To change to message partner display name, click Edit, change the name, and click Save.

| Admin | Users | Message types | Partners | Stylesheets |
|-----------------|--------------|---------------|------------------|-------------|
| essage partners | Access rig | ghts | | |
| | | | | |
| | Message p | oartner id | Message partn | er name |
| Edit Delete | | | | |
| Edit Delete | -1 | | Default | |
| Edit Delete | Aaliyah Cru | IZ | Aaliyah Cruz Hal | lo |
| Edit Delete | Aaliyah Rey | /es | Aaliyah Reyes | |
| Edit Delete | Aaron Robi | nson | Aaron Robinson | FFFF |
| Edit Delete | Abigail Stev | vart | Abigail Stewart | |
| Edit Delete | Adam Gree | n | Adam Green | |
| Edit Delete | Addison Mo | rris | Addison Morris | |
| Edit Delete | Adrian Pére | z | Adrian Pérez | |
| Edit Delete | Aidan Scott | | Aidan Scott | |
| Insert Cancel | | | | |
| 1234567 | 8 9 10 | | | |

To assign rights to certain message partners, you click Partners > Access rights.

| Admin | Users | Messa | age ty | pes | F | Partners | Stylesheets | User | actio | ons | Datab | ase |
|---------------|--------------------------|---------|----------|----------|-----|----------|-----------------|--------|-------|----------|----------|-----|
| Message partn | ers Access ri | ghts | | | | | | | | | - | |
| Choose a | message partr | ner: Aa | aliyah | ı Rey | /es | Rece | or 🗖 All p | artner | s | | | |
| Senders | | LR | R/T | A | | heec | | L | R | R/T | A | |
| Administr | ators | V V | V | V | × | Adm | nistrators | 1 | V | V | V | |
| COMMUN | ICATE\pharseth | V V | V | V | × | СОМ | MUNICATE\pharse | eth 🗸 | V | V | V | |
| jabba | | V V | | | × | jabba | 3 | 1 | 1 | | | |
| Choose (| user | | A | dd | | Choo | se user | | • | Ad | ld | |
| | | | | | | | | Sa | ave A | Acces | srights | 5 |
| | ne/Terminate istrator | | | | | | | | | | | |

To assign the same rights to all partners check the "All partner" checkbox. Add the users to assign rights, and save.



5.3 Message Types

Administrators

R/T Resume/Terminate A Administrator

L Log R Read Add

Save access rights

Message types are set up under the Message types tab. Setting up a message type makes MTM try to automatically detect a given message type during processing in the receive pipeline.

Message types > All message types shows all the message types registered

| | | ssage types Partners | Stylesheets | User actions | Database jobs | Defined fields | Miscellaneous | | |
|----|----------------------------|--------------------------|-------------|-------------------|---------------|------------------|---------------|----------------|---|
| me | essage types Create mess | age type Access rights | | | | | | | |
| Id | Message type name | BizTalk schema | Doc | cument Id | F | Receiver | | Sender | |
| 1 | Default | | | | | | | | 3 |
| 2 | Overseas order details | 1 | | | 5 | Store | | | 3 |
| 3 | Overseas order | BizTest.InFile, BizTest, | /*[| ocal-name()='File | Root N | Mottaker | | Sender | 3 |
| 4 | Receipt | BizTest.Correlation, Bi | zT | | | | | | 3 |
| 5 | Registration | 1 | | | (| Customer | | Store | 3 |
| 6 | Delivery note | 1 | | | (| Customer | | Store | 3 |
| 7 | Salary | 1 | | | ١ | Wage earner | | Employer_test4 | 3 |
| 8 | Invoice | Demo.Invoices.Invoice | e, De /*[| ocal-name()='inv | pice' / | *[local-name()=' | invoice' | Seller | 3 |
| 9 | Sales order | BizSimple.SimpleResc | ve, /*[| ocal-name()='Roo | ot' an / | (*[local-name()= | Root' an | Store | 3 |
| 10 | Sales order confirmation | 1 | | | c | customer | | Store | 3 |
| 11 | Purchase Order | 1 | | | 5 | Seller | | Buyer | 3 |
| 12 | Purchase requisition | 1 | | | E | Buyer | | Staff | 3 |
| 13 | Registration vendor | , | | | E | Buyer | | Staff | 3 |

Clicking on a row lets you edit that message type. Clicking the red X will delete that message type. If a message type has any message entries attached to it, it cannot be deleted.

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Message types > Create message type lets you create a new message type

| Admin | Users | Message types | Partners | | Stylesheets l | User actions | Database jobs | Defined fields | Miscellaneous | |
|----------------|---------------|---------------|---------------|---|----------------|--------------|---------------|----------------|---------------|--|
| All message ty | pes Create m | essage type 🛛 | Access rights | | | | | | | |
| | | | | | | | | | | |
| Name: | | My message | type name | | | | | | | |
| BizTalk Sch | iema: | My BizTalk sc | hema | 2 | | | | | | |
| | | | | | | | | | | |
| DocumentI | d: | xpath exp | (| 2 | Receiver: | xpath | n exp | Q | | |
| DocumentI | d namespace: | | | | Receiver names | pace: | | | | |
| Document | message type: | | | | Sender: | xpath | n exp | Q | | |
| | | | | | Sender namesp | ace: | | | | |
| | | | | | | | S | ave | | |

A message type is differentiated by its BizTalk schema. This can be looked up through the looking glass next to the BizTalk schema textbox.

To further differentiate between messages and making it easier to search through them, one can set up the document id, receiver and sender to do an xpath lookup in xml files it receives of the message type. Clicking on the hourglass next to those fields lets you pick elements from the currently selected schema.

To assign rights to certain messages type, you click Message types > Access rights

| Admin | Use | ers | Messa | ge types | Partners |
|----------------|----------|----------|---------|----------|---------------|
| All message ty | pes 🕴 C | reate m | iessage | type | Access rights |
| Choose me | essage t | type: D | efault | | • |
| | LR | R/T A | | | |
| MTMAdmin | V V | v | × | | |
| Test | V | | I X | | |
| Add user | | | • | Add | |
| | | Save | Access | rights | |
| L Log | | | | | |
| R Read | | | | | |
| R/T Resum | ne/Termi | nate | | | |
| A Admin | istrator | | | | |





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5.4 User defined search fields

User defined search fields are used in situations where you want message correlation (f.ex message receipts) or if you want enhanced search performance in certain scenarios.

A user defined field is set up by specifying an xpath expression. MTM will then do a lookup in the message contents when it processes this message type and stores the resolved value in a dedicated value.

You can then search for this value specifically through the search interface without using the free text search.

User defined search fields are set up by clicking Defined fields.

| Admin | Г | Users | Message types | Partners | Stylesheets | User actions | Database jobs | Defined fields | Miscellaneous | |
|----------------|-----|---------------|-------------------------------------|-----------------------------|-----------------|-------------------|--------------------|-------------------|---------------|------------------------|
| | | | | | | | | | | |
| Message | Тур | oe Overseas | s order | Rebuild | index | | | | | |
| Fi | eld | Name | Se | arch Param | | Search | Param Namesp | ace | | |
| Insert | | | | | Add | | | | | |
| | Id | Field Name | Search Parame | ter | | | | | | ch Parameter espace |
| Edit Delete | 1 | | /*[local-name()= namespace-uri() | | mespace-uri()=' | http://BizTest.In | File']/*[local-nam | ne()='Bjarne' and | t i | |
| | | | | | | | | | | |

The "Rebuild index" button will rebuild indexes for the selected message type to make the user defined search work on the historical data.

5.5 Message Correlation

Message correlation is used together with the pipeline component AppRecMTMReceive.

The functionality of setting up the correlation is identical with the user defined search fields, and the search parameter must be an xpath expression pointing to the correlation value. When the correlation is set, the application receiver will be logged with the main message.

5.6 Style sheets

Xml files can often be complex and hard to search through. Its therefore possible to upload and assign xslt files to message types. This allows you to show a formatted version of message types according to your own specification.

Managing style sheets is done through the Style sheets tab.

- Upload style sheets

Lets you upload a style sheet to the MTM database.

- Manage style sheets

Lets you rename and remove style sheets.

Attach style sheets

Lets you choose what style sheets are to be visible for a given message type. Choose a message type from the dropdown, select the style sheets you want associated with that message type and click save.

- Default style sheets

Lets you assign a style sheet as being default for a message type. This will make the style sheet appear as the default choice for message format when viewing message logs.

5.7 User actions

| Search Use | r Actions | | | |
|-----------------|--------------------|--------|--|--|
| From Date: | 17.03.2010 | | | |
| To Date: | 17.03.2010 | | | |
| Username: | MTMAdmin | • | | |
| Action Type: | Select action type | • | | |
| | | Search | | |

Total number of records: 6

| User name | Action type | Description | Time |
|-----------|------------------|--|---------------------|
| MTMAdmin | Login | Logged in | 17.03.2010 14:27:04 |
| MTMAdmin | Login | Logged in | 17.03.2010 14:13:11 |
| MTMAdmin | UserActionSearch | Searched UserActions. SearchCriteria: MTMAdmin, 17.03.20 | 17.03.2010 14:01:36 |
| MTMAdmin | Updateuser | Updated user mtmtest | 17.03.2010 14:01:26 |
| MTMAdmin | AddComment | Added comment 'new comment' for messageid 129 | 17.03.2010 14:01:09 |
| MTMAdmin | Search | Searched from 08.03.2010 00:00:00 to 17.03.2010 00:00:00 | 17.03.2010 14:00:49 |

The administration of user actions has two main parts, the search area and the list of results. The search area needs minimum from and to values and a username or an action type. It also supports combinations of usernames and action types. The result will be listed in a grid showing the user name, the action type, the description of the action and time for when the action was performed. The description column hides longer text by showing ... clicking inside this cell will show the hidden text. The setting in the web config file will turn on/off this feature.

<add key="LogUserActions" value="true" />

5.8 Database jobs

There is possible to setup two database jobs for the MTM database. The jobs are created to easy cleanup or move messages or message content from the main MTM database. The jobs are created in the SQL Server Agent and calls stored procedure to clean or move data. In most cases only choose one of the strategies to handle your data. You either chose to move your data using the archive strategy or delete your data. A combination is only necessary if you want to archive the data without the message content. Each job can be filtered by the message type. This is setup under the "Filter by messagetype" tab. Note that the main database job has to be setup and enabled to use the filtering by message type.

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5.8.1 Main database job

The main jobs will work on all message types not specified under the "Filter by Messagetype".

5.8.1.1 Clean MTM

This job deletes messages and/or the file content of the tracked messages. Please note that when this job runs the messages are deleted and cannot be recreated if there is no backup of this data elsewhere.

| Administer Database Jobs | | |
|---|------------|-------------|
| Job: | Clean MTM | • |
| Frequency type: | Daily | |
| Recurs every: | 1 | day(s) |
| Occurs at: | 00:00 | (HH : MM) |
| Start date: | 01.04.2010 | |
| How many days to keep log data: | 100 |] |
| How many days to keep log filecontent: | 20 |] |
| Enabled: | | |
| | | Update |

The properties for this job are as described in table below:

| Field | Description | Mandatory |
|-----------------------|--|-----------|
| Job | Name of the job | √ |
| Frequency type | Always based on Daily | ~ |
| Recurs every | How often the job is run based on frequency type. 1 is every day, 7 is once a week etc. | √ |
| Occurs at | Time of day, when the job starts. Always run jobs when the server has the lowest workload. | × |
| Start date | The date the job starts for the first time. | ~ |
| How many days to keep | The number of days to keep data all | √ |



| logdata | messages older will be deleted. | |
|--|--|--------------|
| How many days to keep log file content | The number of days to keep files content, all file content older will be deleted. This number have to be equal or less to how many days to keep log data property. | ✓ |
| Enabled | If the job is enabled to run or not. | \checkmark |

5.8.1.2 Archive MTM

This moves database content from the main MTM dataset to an archive database.

| Administer Database Jobs | | |
|---------------------------------|-------------|---------|
| Job: | Archive MTM | 1 💌 |
| Frequency type: | Daily | |
| Recurs every: | 7 | day(s) |
| Occurs at: | 00:00 | (HH:MM) |
| Start date: | 01.01.2010 | |
| How many days to keep log data: | 64 | |
| Enabled: | | |
| | | Update |

The properties for this job are the same as for the clean job, with exception of the how many days to keep log file content property. The property how many days to keep log data will control how many days of data will be kept in the Main database and what exceeds this will be moved to the Archive database.

5.9 Filter by messagetype

This makes it possible to refine the database jobs, by setting up filter by message type. This will override the settings set up in the main database job for the selected message types. The filter settings will be applied when the main database job runs. The List will show all current filters.



| Administer Database . | Jobby message type | | | | | |
|---|---|-------------|-------------------------------------|---------|--------|----------------|
| Job: | C | lean MTM | • | | | |
| Message type: | D | efault | | • | | |
| How many days to ke | eep log data: | | | | | |
| How many days to ke | eep log filecontent: | | | | | |
| | | | | | | |
| | | | Save | | | |
| | | | Save | | | |
| Job M | lessage type | Days to kee | | Days to | keep (| content |
| Job M Delete Archive MTM D | 2 | Days to kee | | Days to | keep (| content |
| | elivery note | Days to kee | ep data | Days to | keep (| content |
| Delete Archive MTM D Delete Archive MTM In | elivery note | | ep data 200 | - | keep (| content 185 |
| Delete Archive MTM D Delete Archive MTM In | Delivery note nvoice Overseas order details | | 200 200 | - | keep (| |
| Delete Archive MTM D Delete Archive MTM In Delete Clean MTM C | Delivery note nvoice Dverseas order details Purchase Order | | ep data 200 200 185 | - | keep (| |

The properties for this job are as described in table below:

| Field | Description | Mandatory |
|---|--|--------------|
| Job | The job type | ~ |
| Message type | The message type to filter on | ~ |
| How many days to keep logdata | The number of days to keep data all messages older will be deleted. | \checkmark |
| How many days to keep log file content | The number of days to keep files content, all file content older will be deleted. This number has to be equal or less to how many days to keep log data property. Only available at the Clean MTM job. | \checkmark |

5.10 Browse the archive

It is possible to setup a dedicated MTM web to use the archive database. This is a bit tricky and do require some manual steps.

- 1. Copy the content from folder C:\Program Files (x86)\Communicate BizTalk Tools\Message Tracking Monitor\ web
- Create a new folder ArchiveWeb under C:\Program Files (x86)\Communicate BizTalk Tools\Message Tracking Monitor and copy the web content here.

- 3. Open IIS and create a new website MTMArcive. Select the MTMPool, set the physical path to the content of the ArchiveWeb and set the port to19975.
- 4. Convert MTMWeb and MTMServices to Applications.
- Open the web.config from C:\Program Files (x86)\Communicate BizTalk Tools\Message Tracking Monitor\ArchiveWeb\MTMWeb and change all the Web service references to point to <u>http://localhost:19975</u>.... And set the key <add key="LogUserActions" value="false" /> to false if it is set to true.
- 6. Open the web.config from C:\Program Files (x86)\Communicate BizTalk Tools\Message Tracking Monitor\ArchiveWeb\MTMServices and change the "MTMConnection" to point to the Archive Database and use a valid user.
- 7. Browse the archive http://localhost:19975/MTMWeb/Default.aspx

5.11 Prerequisites and setup for database jobs

The archive database can be seated on the same or different database server. If it is seated on different database some steps have to be done to the both servers:

The following applies to both jobs.

- 1. Integration Services must be installed on the server where the MTM database is installed.
- If the web server does not have SQL Server 2008 installed. Install Microsoft SQL Server System CLR Types and Microsoft SQL Server 2008 Management Objects from: <u>http://www.microsoft.com/downloads/details.aspx?FamilyId=C6C3E9EF-</u> BA29-4A43-8D69-A2BED18FE73C&displaylang=en
- 3. Both jobs depend on extended rights for the MTM database login. The MTM login has to be added as a user to the msdb system database and given the SQLAgentUserRole.

Archive database job:

 Create Archive database from clicking [Start > All Programs > Communicate BizTalk Tools > Message Tracking Monitor > Database > Create archive database]. Use same procedure as <u>Creating database</u>, the database name created in this process is the base for [DATABASENAME] in the rest of this instruction and the user name and password is the base for the LOGIN and the PASSWORD in 4.

MANA C

- 2. Remember to open for SQL traffic in the firewall on Archive server. Default port is 1433
- 3. Add the archive server as a liked server on the main Server exec sp_addlinkedserver @server = 'SERVERNAME'
- Add a server login.
 exec sp_addlinkedsrvlogin @rmtsrvname = 'SERVERNAME', @useself = 'false', @rmtuser = 'LOGIN', @rmtpassword = 'PASSWORD'
- 5. Test if the connection is OK. select top 1 * from [SERVERNAME].[DATABASENAME].dbo.[Message]
- 6. Open and edit Edit the Move database script ([Start > All Programs > Communicate BizTalk Tools > Message Tracking Monitor > Database >Move database script]). Use the replace function in a text editor to change the [SERVERNAME].[DATABASENAME] to correct names. Then run the Script on the MTM main database to install it. This step has to be done after the server is liked to run correctly.

5.12 Miscellaneous

5.12.1 Stored Search

| Stored search name | |
|--------------------|---|
| Test | × |
| Alle Prøvesvar | × |
| Alle Epikriser | × |
| Prøvesvar spesial | × |

All stored search is listed here, with the possibility to delete.

5.12.2 Message status

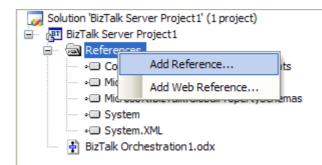
| | Description | Show in user interface |
|---------------|---------------------------|------------------------|
| Edit | Running | J |
| Edit | ОК | J |
| Edit | Resumed | J |
| Edit | Terminated | J |
| Edit | Error | J |
| Edit | Success | J |
| Edit | Suspended (resumable) | J |
| Edit | Suspended (not resumable) | J |
| Edit | Deleted | |
| Edit Delete | New Status | V |
| Insert Cancel | | |

Use the link buttons to edit, delete or insert a new message, status. The application pre created message status only support editing, not deletion. It is not possible to delete a message status that is in use on any message and an error message will be thrown if the user tries to do this.

| Field | Description | Mandatory |
|------------------------|--|-----------|
| Description | The text shown in the user interface | √ |
| Show in user interface | Set the visibility for this status in the dropdown lists in the application. This flag will not have any impact of the showing of the messages in the application | ✓ |

6. Log to MTM from a BizTalk Orchestration

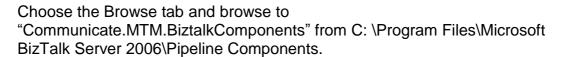
This section describes the possibility to set up direct logging to MTM from a BizTalk Orchestration from a Visual Studio environment.



"Right click" on References and choose "Add Reference"

| Add Reference |
|--|
| NET COM Projects Browse Recent |
| Look in: 🧰 Pipeline Components 🛛 🕑 🤣 📂 🛄 - |
| Communicate.MTM.BizTalkComponents.dll Microsoft.BizTalk.Pipeline.Comp Communicate.MTM.Common.dll Microsoft.BizTalk.Pipeline.dll EncodingConversion.dll Microsoft.BizTalk.Streaming.dll Microsoft.BizTalk.Bam.EventObservation.dll Microsoft.BizTalk.Tracing.dll Microsoft.BizTalk.CachingService.dll Microsoft.BizTalk.XPathReader. Microsoft.BizTalk.DBAccessor.dll Microsoft.XLANGs.BaseTypes.cl Microsoft.BizTalk.Interop.Agent.dll Microsoft.XLANGs.RuntimeType Microsoft.BizTalk.Messaging.dll MITMPipelineComponents.dll |
| |
| File name: Communicate.MTM.BizTalkComponents.dll |
| Files of type: Component Files (*.dll;*.tlb;*.olb;*.ocx;*.exe) |
| <u>A</u> dd ▼ Remo <u>v</u> e ▲ |
| Component Name A Type Version Source |
| Communicate.MTM.BizTa File 1.0.0.5 C:\Program Files\Micros |
| |
| OK Cancel |



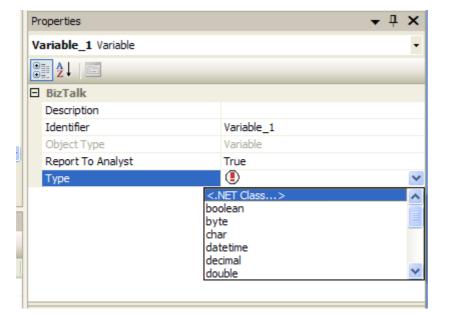


Click Add og OK.

| | Correlation Sets | | |
|---|---|--|--|
| | 🚊 🚽 SendMessages_Scope | | |
| | 🚊 💼 Messages | | |
| | 🛱 🗁 Variables | | |
| | 🗊 New Variable | | |
| | Paste | | |
| | Properties Window | | |
| | streepients | | |
| | striversorgNr | | |
| | strVersjon | | |
| | ToolboxStringSplitter | | |
| | J XmlDoc | | |
| | Correlation Sets | | |
| | Types | | |
| · | | | |
| | | | |
| | | | |
| | | | |
| | Solution Explorer 📓 Orchestration View 🐼 Class View | | |
| | Class view | | |
| | Properties | | |
| | | | |
| | | | |

Choose the Orchestration View and what scope you would like to log

Right click and choose "New Variable"



Give the variable an identifier name.

In the Properties-window, choose Type and <.NET Class ...>

The following window will appear. Choose Communicate.MTM.BiztalkComponents -> MTMLoggerBT. Click OK.

| Current Project Current Project Communicate.MTM.BizTalkCom Communicate.MTM.BizTalkCom Communicate.MTM.BiztalkC Communicate.MIM.BiztalkC Communica | Type Name LocalPartnerEditor MTMAsyncLogDele MTMAsyncLogDer MTMAsyncLogInser MTMAsyncLogInser MTMCommon MTMCommon MTMDecoder MTMDecoder MTMInsertMssgUser MTMInsertMsgUser MTMInsertMsgUser MTMIMessageLoop MTMMPartyResolver | Communicate.MTM.BiztalkComponents.N Communicate.MTM.BiztalkComponents.N Communicate.MTM.BiztalkComponents.N Communicate.MTM.BiztalkComponents.N Communicate.MTM.BiztalkComponents.N Communicate.MTM.BiztalkComponents.N | |
|---|---|--|---|
| | < | | > |

This class has 4 overloads as underlined below



| I of 4 System.Void MTMLoggerBT.InsertMessage (System.String interchangeID, System.String logText, System.String receiver, System.Int32 status, System.String flename, |
|---|
| Microsoft.XLANGs.BaseTypes.XLANGMessage btMessage) |
| interchangeID: Refers to the interchange ID of the original message |
| 🛛 2 of 4 🚽 System. Void MTMLoggerBT. InsertMessage (System. String interchangeId, System. String logText, System. String receiver, System. Int32 status, System. String filename, |
| Microsoft.XLANGs.BaseTypes.XLANGMessage btMessage, System.Boolean waitForReceipt) |
| interchangeId: Refers to the interchange ID of the original message |
| 🛛 3 of 4 💂 System. Void MTMLoggerBT. InsertMessage (System. String interchangeID, System. String logText, System. String receiver, System. Int32 status, System. String filename, System. String btMessage) |
| Insert the message to the MTM Database |
| 📱 4 of 4 💂 System. Void MTMLoggerBT. InsertMessage (System. String interchangeId, System. String logText, System. String receiver, System. Int32 status, System. String filename, System. String btMessage, |
| System.Boolean waitForReceipt) |
| Insert the message to the MTM Database |
| |

Overload 1 and 2 accepts the file contents as a stream, while overload 3 and 4 accepts the file contents as a string. Example of use:

Variable_1.InsertMessage(XmlDocMsg(BTS.InterchangeID),"Converted to filetype ","-1",2,"filnavn", XmlDocMsg);

| InterchangeId | " XmlDocMsg" | Message defined in the same scope as the call to InsertMessage |
|---------------|--|--|
| logText | "Converted to filetype" | Logdescription shown in MTM |
| receiver | "-1" | receiverID - set to "-1" for normal use. |
| status | <pre>"Started = 1" "OK = 2" "Resumed = 3" "Terminated = 4" "Error = 5" "Success = 6" "Suspended resumable = 7" "Suspended not resumable = 8"</pre> | What status the message will receive in MTM |
| filename | "filnavn" | The filename the message will have in MTM |
| btMessage | XmlDocMsg | Contents of the message |



7. Frequently asked questions

- Q: I am getting errors in the errorlog from the MTM windows service stating that "Error occurred while polling suspended messages. Possible cause: <error message>".
- A: The MTM windows service uses WMI to poll BizTalk for suspended messages. A common cause of this error is not having enough rights to perform the operation. The user running the service needs to be a member of both the BizTalk administrator group as well the Enterprise SSO Administrator. Any firewalls present will also need to let through WMI traffic.

Having a lot of messages suspended in BizTalk might also cause problems. WMI has an inherent quota of how much information can be sent and received through it. This varies depending on the windows server version its being run on, but in general this will require several thousand messages suspended to be a problem. The error given in this instance will be a quota violation error. The solution is to reduce the number of messages suspended in BizTalk.