

How to Automate Monitoring of MDM Import Port for Inbound Exceptions



Applies to

SAP MDM 5.5 SP06 with SMD Agent. Solution Manager 7.0, SMD & Wily Introscope

For more information, visit the [Master Data Management homepage](#).

Summary

This document contains the step to automate monitoring of MDM Import Port for Import Exceptions and also summarizes the entire setup of Solution Manager for SAP MDM.

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Author Bio



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Introduction

This document contains the step to generate mail alerts for MDM Import Exceptions using Solution Manager and to explain the Wily Introscope monitoring for Inbound Exceptions.

For reading more about Import Exceptions refer – MDM Import Manager Reference Guide.

Exception Handling

In an ideal world, all import files would be free of errors. In the real world, however, inconsistencies in file structures and data values can and do occur. Rather than halt the import process entirely when such errors are encountered, MDIS includes a smart exception-handling mechanism which enables it to set aside “problem cases” and continue importing records and files. These problem cases can then be reviewed manually in the Import Manager.

What happens when exceptions occur during MDM import?

When the Import Manager/Server encounters an exception, it handles the exception according to its type.

Structural Exceptions

Structural exceptions prevent MDIS from processing any import records in an import file. When a structural exception is found, MDIS moves the offending import file from the port's Ready folder to the port's StructuralX folder. No importing occurs and the port is blocked until the problem is resolved.

Value and Import Exceptions

Value and import exceptions prevent MDIS from importing a specific record. When such exceptions are encountered, an exception file for the offending record is copied to the ValueX or ImportX folder, respectively.

MDIS then continues processing the import file and all other, nonexceptional records are imported as normal.

NOTE ►► MDIS only logs the first exception it encounters in a record.

Port Blocking

Any port containing a structural exception is blocked by default from any further import activity. Blocked ports are skipped by MDIS and their names are grayed out in the Port list on the Import Manager's Connect to Source dialog. When the structural exception is fixed, the Import Manager unblocks the port and processing resumes as normal

Prerequisite

SAP MDM 5.5 SP06

SMD Agent running on MDM Server

Solution Manager 7.0

Business Requirement

To automate the monitoring of Import Port and to throw a mail alert to the MDM Administrator informing that there is an Inbound Exception encountered.

Business Problem with Manual Monitoring of MDM Import Port

In a MDM live environment, there can be import activities running all the time depending on various business scenarios. For example consider you are creating a new master record for which you need to enrich the data with some third party vendor like DnB, so whenever a record is syndicated to DnB service for enrichment, DnB sends back the enriched data which is then placed to the Import folder of MDM by the DnB Enrichment Adapter. Then the data is imported into MDM repository by MDM Import Server.

Now consider that due to some structural exception in the Import file, the MDM Import port gets blocked which causes all other import on the same port to be on hold. Unless someone manually check the Port status from SAP MDM console this structural exception cannot be resolved causing all other import stuck.

So the below monitoring steps will enable this to happen automatically.

Steps to Setup the Monitoring for MDM Import Exceptions

Below Step 1 to 7 can be ignored if Solman is already configured for monitoring SAP MDM with reference to MDM Monitoring Guides from www.service.sap.com/installmdm . I am mentioning the steps 1 to 7 to ensure that all following steps are completed before we start monitoring

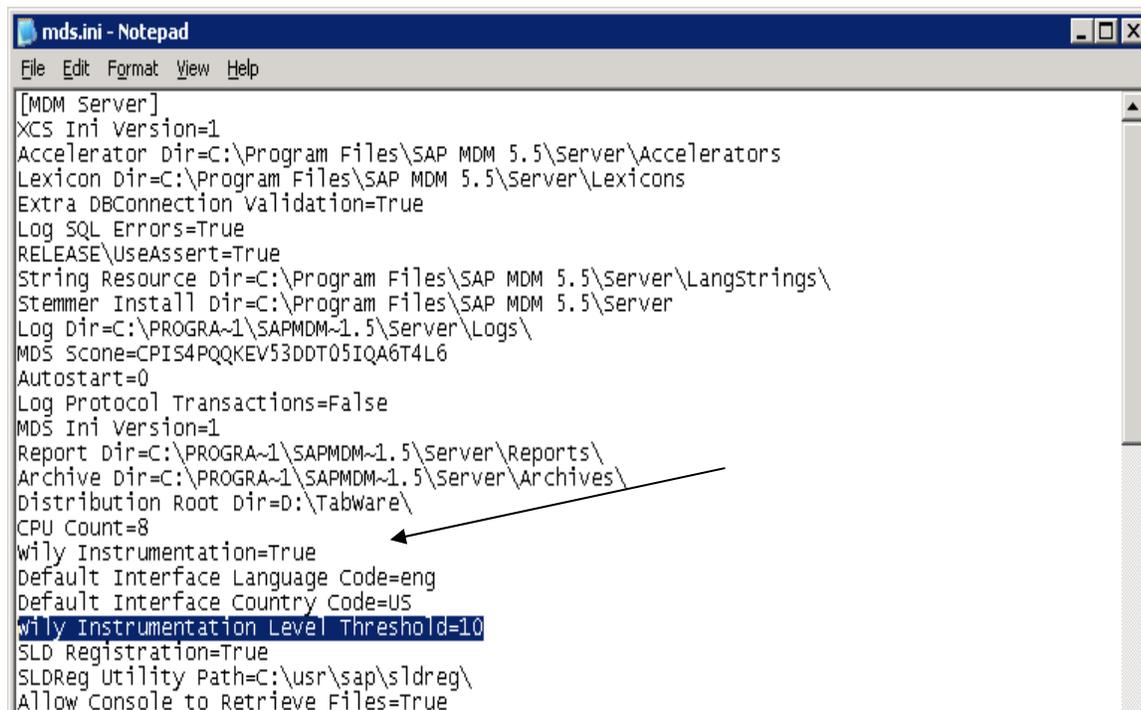
Step 8 and Step 9 for monitoring Inbound Exception using Wily Introscope.

Step 10 to Step 13 to raise an automatic alert in form of email for Inbound Exceptions.

Step 1) Configure SMD Agent on SAP MDM Server

Step 2) Configure NCS on SAP MDM Server

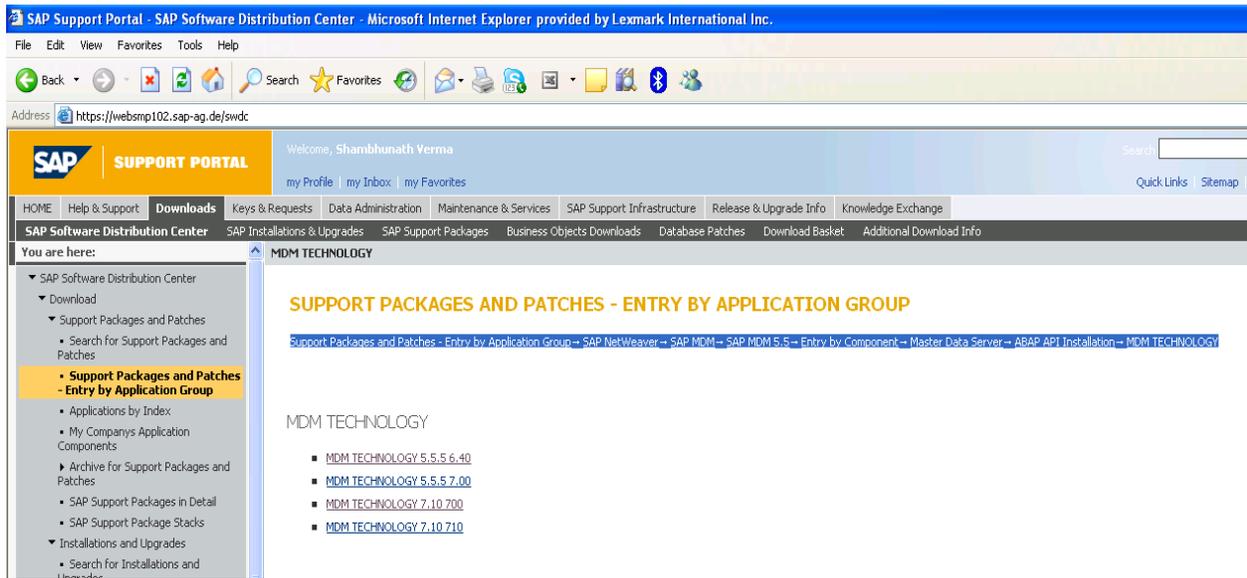
Step 3) Enable Wily Instrumentation to True in MDS.ini and restart MDM



```
mds.ini - Notepad
File Edit Format View Help
[MDM Server]
XCS Ini Version=1
Accelerator Dir=C:\Program Files\SAP MDM 5.5\Server\Accelerators
Lexicon Dir=C:\Program Files\SAP MDM 5.5\Server\Lexicons
Extra DBConnection Validation=True
Log SQL Errors=True
RELEASE\UseAssert=True
String Resource Dir=C:\Program Files\SAP MDM 5.5\Server\LangStrings\
Stemmer Install Dir=C:\Program Files\SAP MDM 5.5\Server
Log Dir=C:\PROGRA~1\SAPMDM~1.5\Server\Logs\
MDS Scone=CPI54PQQKEV53DDT05IQA6T4L6
Autostart=0
Log Protocol Transactions=False
MDS Ini Version=1
Report Dir=C:\PROGRA~1\SAPMDM~1.5\Server\Reports\
Archive Dir=C:\PROGRA~1\SAPMDM~1.5\Server\Archives\
Distribution Root Dir=D:\Tabware\
CPU Count=8
Wily Instrumentation=True
Default Interface Language Code=eng
Default Interface Country Code=US
Wily Instrumentation Level Threshold=10
SLD Registration=True
SLDReg Utility Path=C:\usr\sap\slereg\
Allow Console to Retrieve Files=True
```

Step 4) Apply SAP MDM_TECT 555 on Solution Manager 7.0 for MDM CCMS Templates

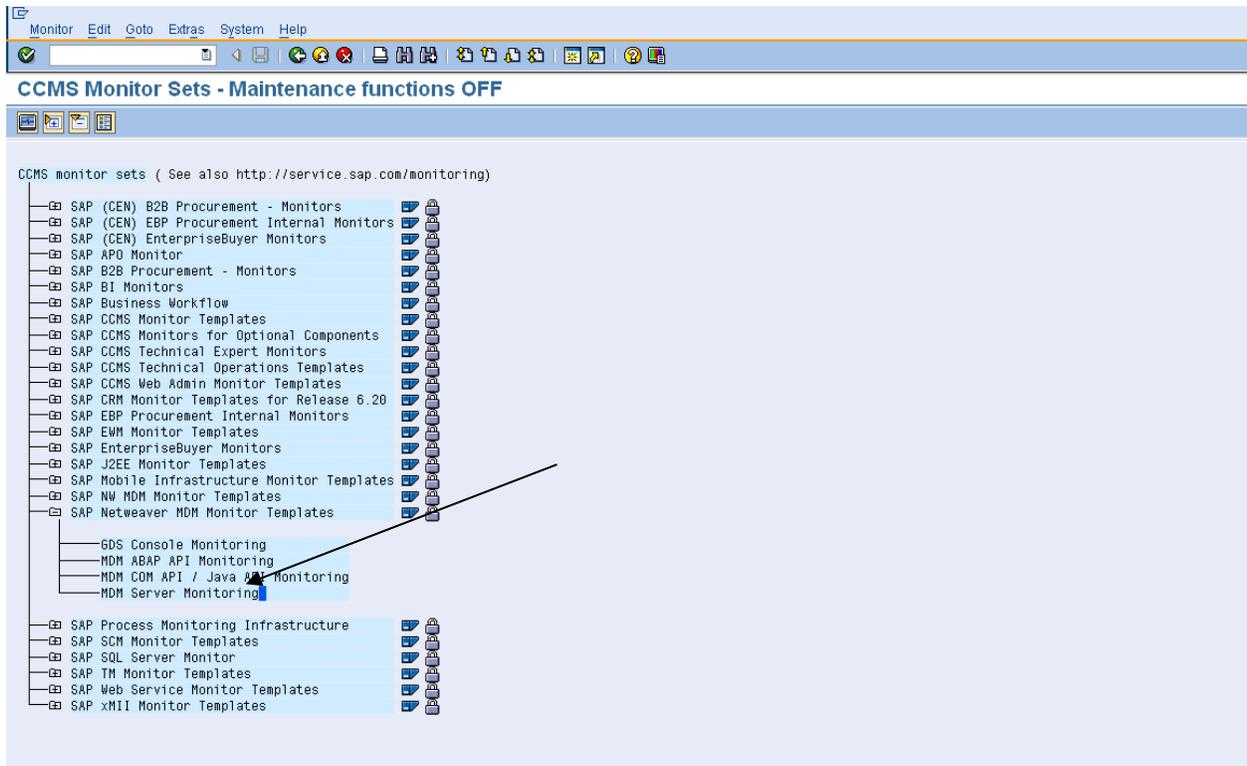
This MDM Technology component can be downloaded from www.service.sap.com/swdc following the path highlighted in the screenshot



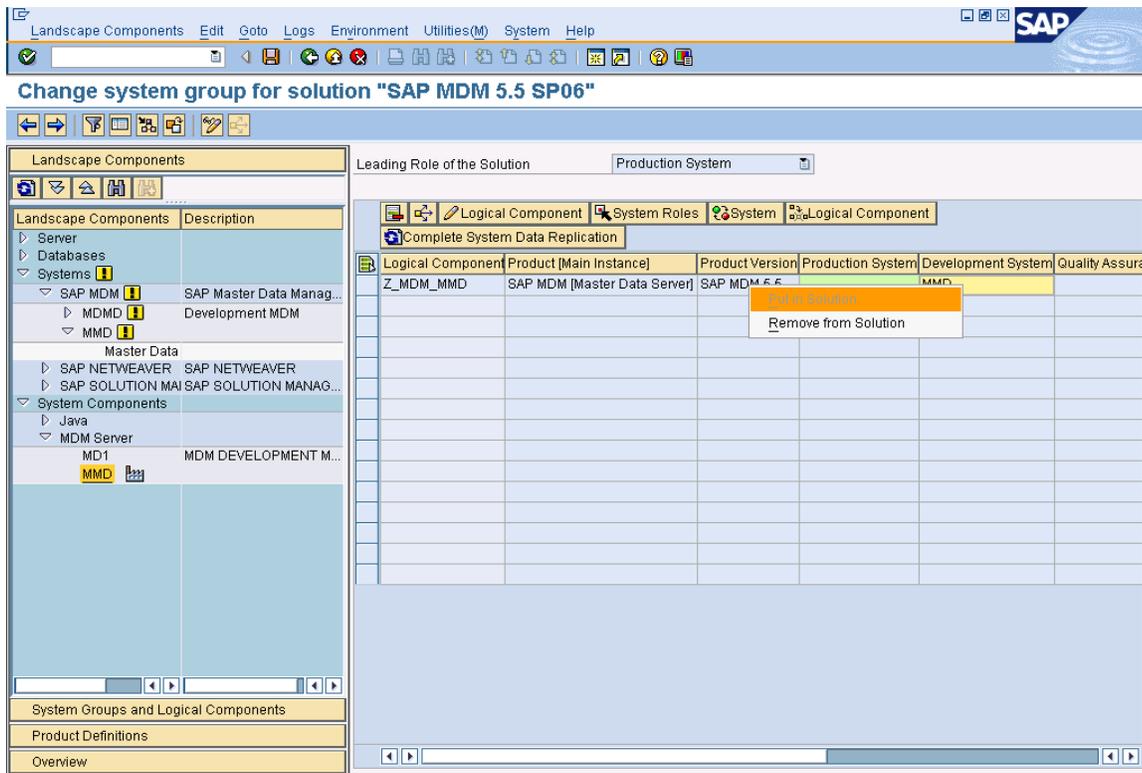
After applying MDM Technology component, you can check in Solution Manager → System Status → Components → MDM_TECH 555

Software Compon...	Release	Level	Highest Support ...	Short Description of Software Compon
ST	400	0017	SAPKITL427	SAP Solution Manager Tool
MDM_TECH	555_700	0000	-	MDM_TECH 555 : Add-On Installation
BI_CONT	703	0012	SAPKIBIIQ2	Business Intelligence Content
ST - A/PI	01L_CRM570	0000	-	Application Servicetools for CRM 500 5
ST - ETP	100	0000	-	Extended tracability package
ST - ICO	150_700	0015	SAPK - 1507FINSTPL	SAP Solution Manager Implementation
ST - SER	700_2008_1	0004	SAPKITL004	SAP Solution Manager Service Tools
VIRSANH	530_700	0005	SAPK - 53305INVIRS	SAP GRC Access Controls 5.3 for 700

Step 5) Check the MDM CCMS Template on Solution Manager TCODE - RZ20



Step 6) Add MDM Server in Solution Manager Solution Landscape



Step 7) Configure the MDM SMD Agent on Solution Manager Diagnostic Enterprise Manager

In the installation path in below screenshot give the full path for the MDM Installation folder

Managed System : MMD
 Components : MDM IMPORT SERVER 5.5, MDM SERVER 5.5, MDM SYNDICA[...]
 Selected solution(s) : SAP MDM 5.5 SP06

Load Balancer info (optional) Save

Load Balancer Host
 Load Balancer Port https

Initial Passwords (optional)

Table Size auto

Details	Server	Agent	Status	Remarks
<input type="checkbox"/>	MMD	N/A		Setup data must be entered for Master Data Server

Instance Master Data Server Details
 Please select a SMD agent for assignment to MMD
 Agent:
 Installation Path:

Step 8) Login to Wily Introscope and open the MDM MDIS MDSS Activity Detail Dashboard

In the box of Number of files in Inbound Ports place the mouse over the colored line to get the details of the MDM Inbound folder files for each repository running. In the below screen you can see that there are two Inbound Exceptions for repository marked by arrow.

Wily Introscope® WebView
 Logged in as: Admin (Log Out) Enterprise

Console * Investigator Transaction Viewer

MDM MDIS

IntroScope MDM Triage (MDM Overview)

MDIS - Active Impo

Number of Files in Inbound Ports

Number of Files in Outbound Ports

Detail Export Scale

Value = 2.00
 Min = 2.00
 Max = 3.00

Inbound Exceptions:
 Current Value

Resource Allocation

MDM_VENDOR

MDM_NCSI

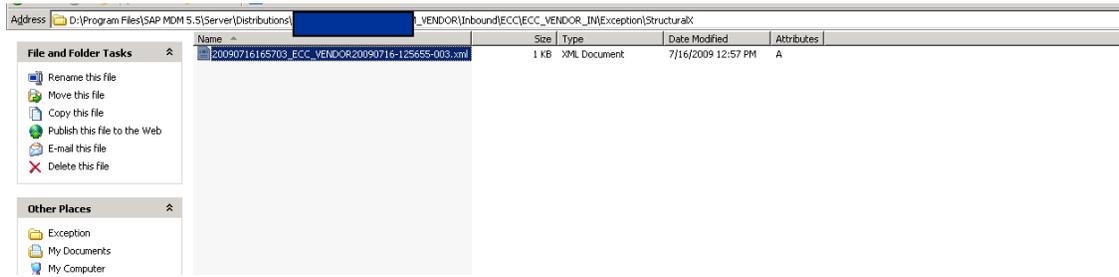
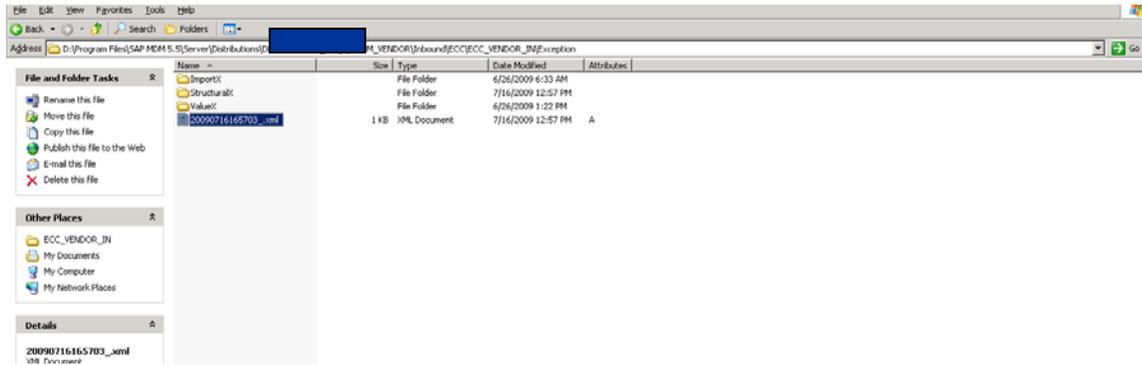
Master Data Server

SAP HostAgent Process

SAP HostAgent J98

Step 9) Login remotely to open the MDM Distribution Folder on MDM Server

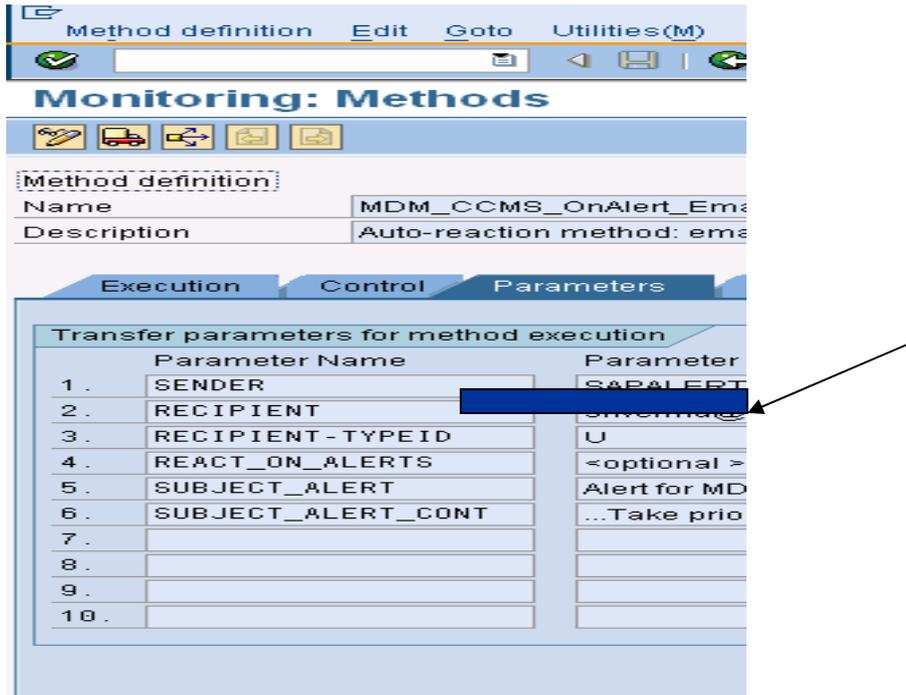
Because of inbound exception you can see an Exception file in the Distribution folder of the respective repository as shown below



After this you can open the Exception File and rectify the problem and move/delete the exception file which will unblock the MDM Import port because of this Structural Exception.

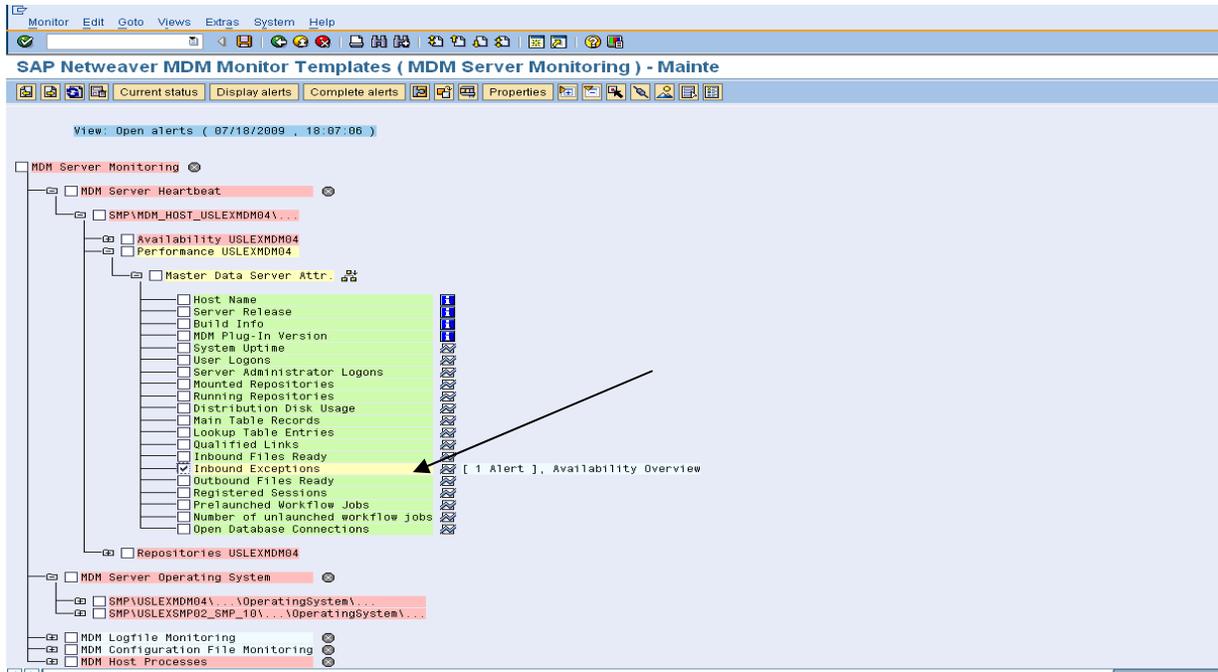
Step 10) Define a Method for Mail Alerts in TCODE – RZ21 or use MDM_CCMS_OnAlert_Email_V2

Double click and setup alert configurations like below. You can add any mail id in Recipient Parameter value



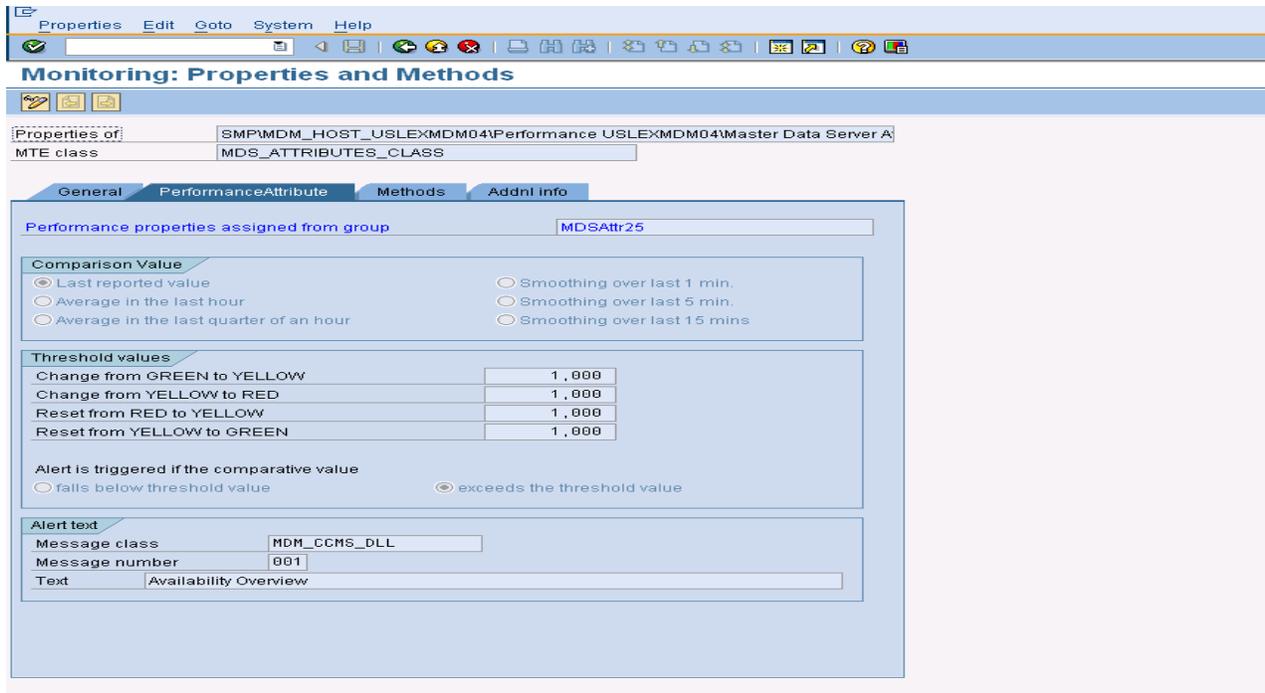
Step 11) Login to Solution Manager and enter TCODE RZ20 to open CCMS Alerts

In screenshot you can see the Inbound Exception Alert

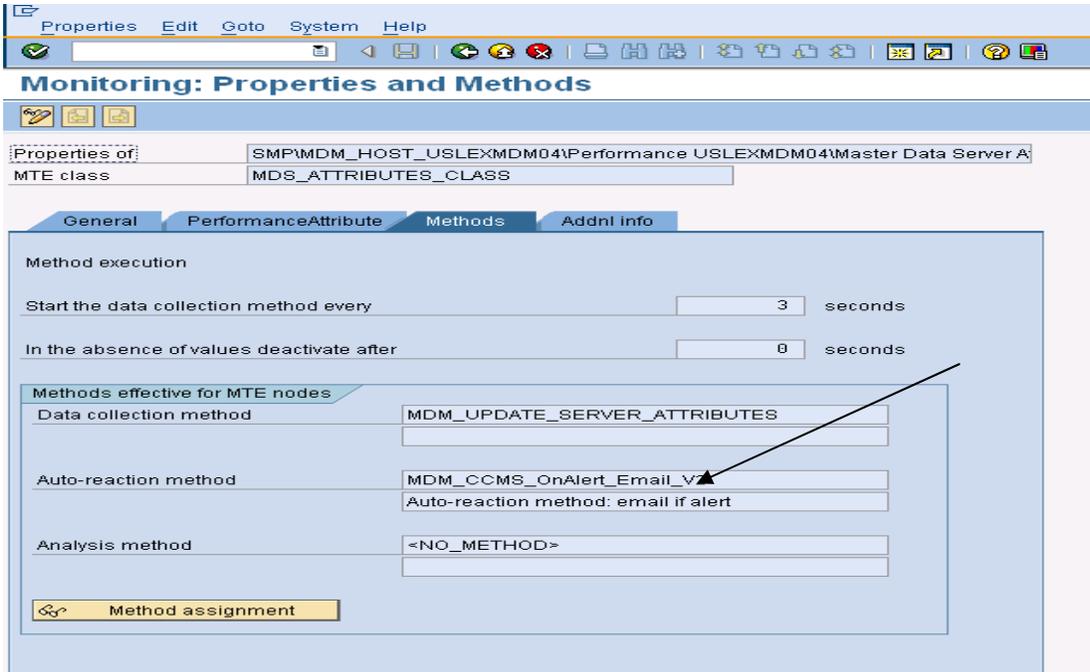


Step 12) Open the Properties for Inbound Exceptions

Select the inbound exception checkbox and click on Properties button on top Menu. In the screen below select "exceeds the threshold value" option and then open Methods Tab

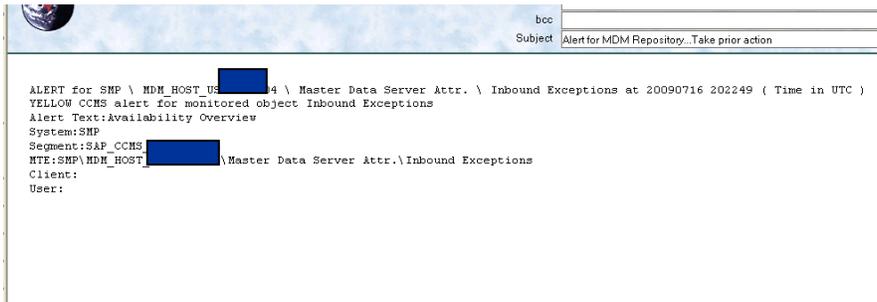


In the Methods tab assign the Auto-Reaction Method as shown in screenshot



Step 13) Mail Alerts will be received for any Inbound Exceptions hereafter

Whenever any Inbound Exception file will be generated an automatic mail alert will be triggered as below



This completes the configuration for monitoring MDM Import Exceptions and raising a mail alert for the same.

Similarly configuration can be done for different options like MDS/MDIS/MDSS Process Count

This configuration will generate a mail alert whenever MDM goes down.

Related Content

<http://service.sap.com/installMDM> - MDM 5.5 Import Manager Reference Guide

<http://service.sap.com/installMDM> - MDM 5.5 Monitoring Guides

Monitoring Capabilities and Root Cause Analysis for SAP MDM -

<https://www.sdn.sap.com/irj/scn/go/portal/prtroot/docs/library/uuid/3065806b-dce5-2a10-1493-c933ac8daca5>

For more information, visit the [Master Data Management homepage](#).

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