Oracle® Hospitality Inventory Management

Deployment Guide
Release 8.5.0 Patch 1
E71455-01

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ORACLE

Contents

Preface

This document provides information and instructions for preparing your environment and then deploying Oracle Hospitality Inventory Management.

Audience

This document is intended for administrators and technicians responsible for maintaining an Oracle Hospitality Inventory Management deployment.

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL:

https://support.oracle.com

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- Screen shots of each step you take

Documentation

Oracle Hospitality product documentation is available on the Oracle Help Center at http://docs.oracle.com/en/industries/hospitality/

Revision History

Date	Description of Change
February 2016	• Initial publication.
June 2016	• Added prerequisite requirement for Microsoft Visual C++ 2010 Redistributable package.

1 Overview

The purpose of this document is to provide instructions for upgrading an existing Inventory Management environment to version 8.5.0 Patch 1. It is assumed that the Inventory Management installation being upgraded has all necessary prerequisites of prior versions.

Before Starting

See the *Oracle Hospitality Inventory Management 8.5.0 Patch 1 Patch Release Notes* for information about new or changed features and updates to system requirements and compatibility.

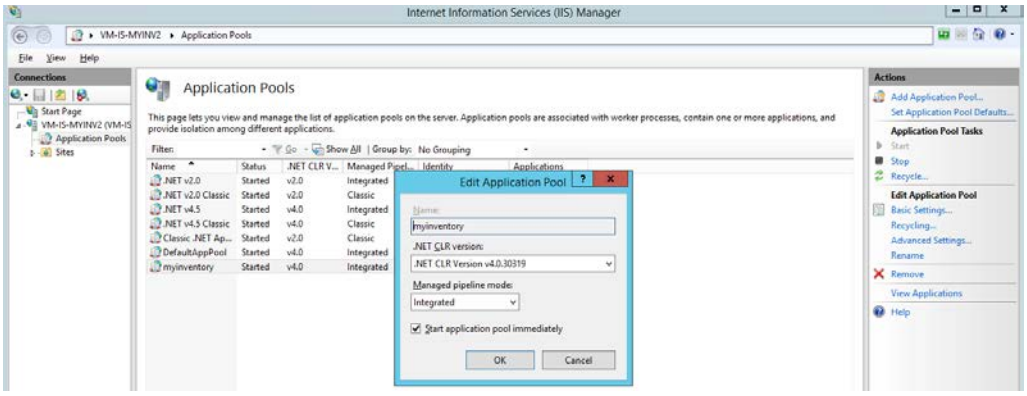
Files Included

The 8.5.0 Patch 1 release of Inventory Management includes the following files:

- 151222_MobileWebService 8.5.0.67.1560.zip
- 151126_myOrganizations 8.5.0.64.1560.zip
- 151112_AutomationService (LB) for MYINV 8.5.0.80.1560.zip
- 151222_myinventory_DBMaintenance (32-bit)_8.5.0.20.1560.zip
- 151222_myinventory_DBMaintenance (64-bit)_8.5.0.20.1560.zip
- 151222_myinventory 8.5.0.89.1560.zip
- 151016_ASAMon 8.5.0.54.1560.zip
- ODAC121024Xcopy_x64-30165.zip (install only if version found on the ODP download Page is lower or equal 12.1.0.2.4)

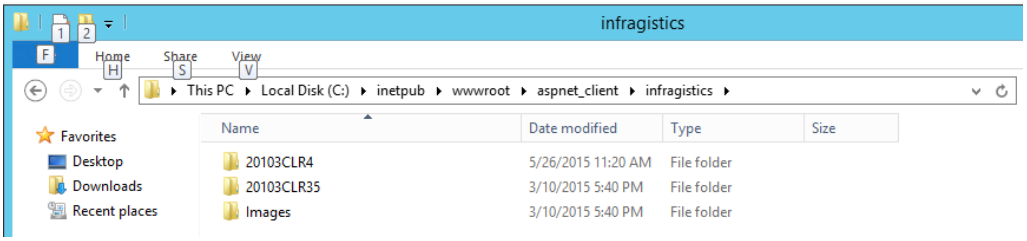
Prerequisites

- You must install .NET (Full, not Client Profile) on the client PC. You can download the installer from Microsoft or automatically install it during DBMaintenance or AutomationService setup.
- Microsoft Visual C++ 2010 Redistributable Package must be installed on Microsoft Windows Server 2008 R2 and Microsoft Windows Server 2012 R2. Make sure you download and install the correct package for your operating system bits.
- You must install Oracle Data Provider for .NET. You can download a package from the Oracle website. Select the appropriate 32-bit or 64-bit version for your system and for the Oracle Client.
- Execute the command line prompt: `install.bat odp.net4 c:\oracle odac`
- Add `c:\oracle` and `c:\oracle\bin` to the system PATH before other Oracle paths.
- Copy `tnsnames.ora` and `sqlnet.ora` from an existing Oracle client installation to `C:\oracle\network\admin`
- Web applications must run in an Application Pool that uses .NET and is in integrated managed pipeline mode.



- Copy the .NET Infragistics scripts from the Inventory Management package to `inetpub\wwwroot\aspnet_client\Infragistics`

  This creates the new folder `\2013CLR4\`



Deploying Inventory Management

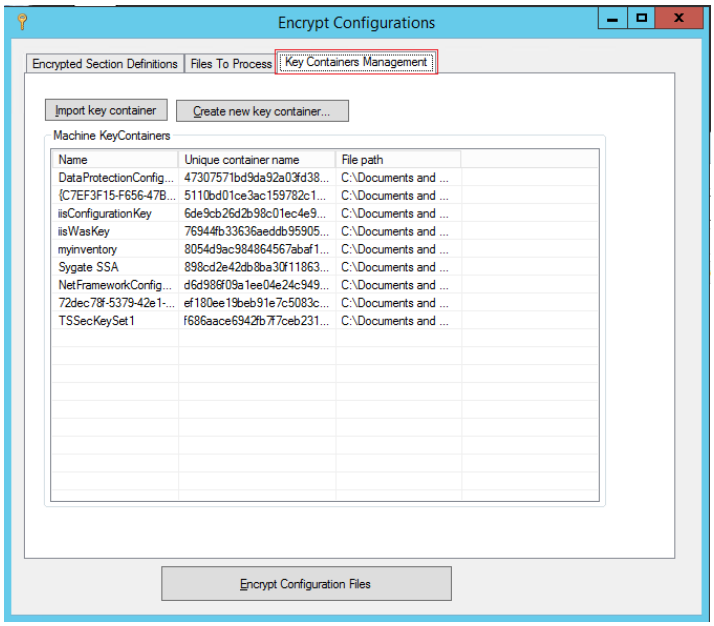
You must deploy Inventory Management applications in the following order:

- Install the applications. Oracle recommends a fresh installation of 8.5.0 applications due to changes to configuration files. If you perform an upgrade, you must move existing .config files to a backup location.
- Perform the following security configurations:
  - Use the "SecureConfig" tool to create (or import) key container.
  - Define the encryption key parameters.
  - Encrypt configurations.

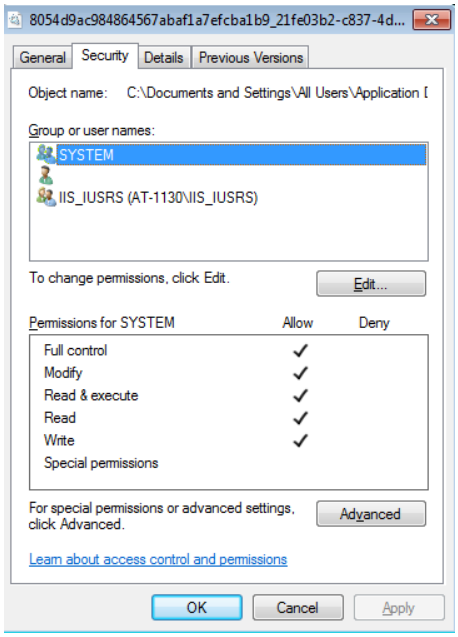
  See the *Oracle Hospitality Inventory Management Security Guid*e for information and instructions pertaining to securing your application.
- Update database(s).

Use the SecureConfig tool to create or import key container

1. Run the SecureConfig tool as an Administrator and click **Encryption Key Containers** to show the list of machine key containers on the PC.

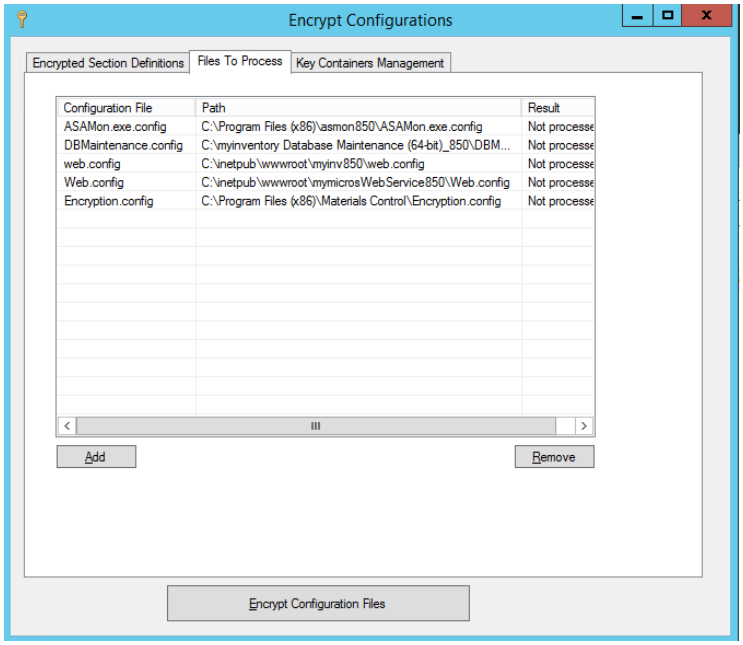


2. If there is no **myinventory** machine key container, click **Create new key container** when installing at a site for the first time, or click **Import key container** if there is an existing installation at the site.
3. Name the key container `myinventory`.
4. To grant access to the key container, right click **myinventory** and click **Show key-file properties**.
5. Select the **Security** tab and give **SYSTEM** full control. If the PC is going to be used for ASP.NET, give **IIS_USRS** `Read` access.



6. On the **Files to process** tab, click **Add** and add the Configuration files that require encryption depending on your installation:

AutomationService Activity Monitor:	ASAMon.exe.config
AutomationService:	AutomationService.exe.config
DGMIMS:	MobileSolutionsClient.exe.config
MobileWebService:	Web.config
Inventory Management:	web.config
mymicrosWebService:	web.config
myOrganizations:	web.config
POSWebService:	web.config
DBMaintenance:	DBMaintenance.config
Thick Client:	Encryption.config



Update Databases

Use the Database Maintenance tool to update databases to 8.5.0. Inventory Management no longer supports the thick client Database Updater and the full MC thick client.

When you update the database for the first time, Database manager re-encodes data. Inventory Management and other Enterprise Back Office applications can use the data after re-encoding the data.

Warning: You cannot undo this operation.

Deploying Inventory Management on Other PCs

1. On the original installation PC, run the SecureConfig tool, then right-click the **myinventory** key container, and then select **Export** to export the key container.

2. On the new PC, run the SecureConfig tool, then click **Import key Container**, and then select the key container you exported.
3. To grant access to the key container, right click **myinventory** and click **Show key-file properties**.
4. Select the **Security** tab and give **SYSTEM** full control. If the PC is going to be used for ASP.NET, give **IIS_USRS** `Read` access.
5. Copy the .config files from the original installation PC.

2 Installation Process

This chapter provides instructions for installing the Inventory Management web application services, the Automation Service Activity Monitor tool, and the Database Maintenance tool.

Preparation for Upgrade

1. Copy all files from the 8.5.0 Patch 1 build to a temporary directory on the Inventory Management application server.
2. Stop the **IIS Admin Service**, **DGService**, **DGNetService** (which can be uninstalled), and **delegateSys.myinventoryAutomation2** services.
3. Uninstall DGNetService.
4. Make backup copies of the following directories:

   C:\inetpub\wwwroot

   C:\myinventoryAutomation2

   C:\myinventoryService (you can remove this directory after backup)

   C:\Program Files\Materials Control (you can exclude the log files)

   C:\Program Files\DBUpdater (you can exclude the log files)
5. If you are upgrading to 8.5.0 Patch 1 from a version older than 8.5.0, uninstall existing instances of the Database Maintenance tool.

Web Applications

You must deploy the updated files for the myOrganizations, WebClient, mymicrosWebService, and POSWebService web applications to Internet Information Services (IIS).

The Inventory Management IIS webpages for this example are represented as <WebClientDir>, <myOrgDir>, and <WebServiceDir>.<POSWebServiceDir>. Replace these with the names of the IIS directories in your environment. For example, in US Production, use C:\inetpub\wwwroot\webclient in the place of <WebClientDir>, and in EAME environments, use C:\inetpub\wwwroot\myinventory

1. Extract the contents of 151126_myOrganizations 8.5.0.64.1560.zip to a temporary directory. This creates the following files:
   - myOrganizations.Application
   - myOrganizations.Config
2. Extract the contents of 151222_myinventory 8.5.0.89.1560.zip to a temporary directory This creates the following folders:
   - Infragistics Scripts
   - myinventory.Application
   - myinventory.Config
3. Create a backup of the <WebClientDir>, <WebServiceDir>, and <myOrgDir> folders, then empty the content of each folder.

4. Copy the contents of the myinventory.Application directory to the C:\inetpub\wwwroot\<WebClientDir> directory.
5. Copy myinventory.Config\web.config to the C:\inetpub\wwwroot\<WebClientDir> directory.
6. Navigate to the backup <WebClientDir> directory, open web.config in a text editor, and copy everything between the <appSettings> and </appSettings> tags. In the new <WebClientDir> directory, open web.config in a text editor, and paste the copied content into the new <appSettings> section. Make sure to overwrite the default content.
7. If you stored custom files such as recipe images in the <WebClientDir> directory, copy the files from the backup <WebClientDir> directory to the new <WebClientDir> directory.
8. Navigate to C:\inetpub\wwwroot\aspnet_client and delete the existing Infragistics folder.
9. Extract the contents of Infragistics Scripts\Infragistics.zip to C:\inetpub\wwwroot\aspnet_client to create a new Infragistics directory.
10. Copy the contents of the myOrganizations.Application directory to C:\inetpub\wwwroot\<myOrgDir>.
11. Copy myOrganizations.Config\web.config to C:\inetpub\wwwroot\<myOrgDir>.
12. Navigate to the backup <myOrgDir> directory, open web.config in a text editor, and copy everything between the <appSettings> and </appSettings> tags. In the new <myOrgDir> directory, open web.config in a text editor, and paste the copied content into the new <appSettings> section. Make sure to overwrite the default content.
13. Copy the content of the mymicrosWebService.Application directory to C:\inetpub\wwwroot\<WebserviceDir>.
14. Change the value of the MyMicrosRefreshURL key to /core/keepLiveAction.do?method=refresh

Automation Service

The Automation Service installation replaces myinventoryAutomation2 with AutomationService.

1. Extract the contents of `151112_AutomationService (LB) for MYINV 8.5.0.80.1560.zip` to a temporary directory.
2. Double-click `setup.exe` and follow the instructions.
3. Repeat Step 1 and Step 2 for each server that will run the AutomationService. The AutomationService automatically performs load balancing when installed on multiple servers.
4. Launch the Automation Service Console and configure the connection to the database.

Automation Service Activity Monitor

1. Extract the contents of `151016_ASAMon 8.5.0.54.1560.zip` to a temporary directory. This creates the following directories:
    - ASAMon.Application

- ASAMon.Config

2. Copy the contents of the `ASAMon.Application` directory applicable to your operating system bits to the installation directory, such as C:\ASAMon\
3. Copy the contents of `ASAMon.Config` to the installation directory.

Server Name

1. Navigate to Automation Service Activity Monitor installation folder and open `fmlogin.ini` in a text editor.
2. Enter the server name for all `DBLogin` parameter instances. For example:
   ```
   [BON]
   DBLogin=server name/BON/MICROS,BON,myinvenMenu.ini
   ```
3. If you are using a Microsoft SQL server, navigate to Automation Service Activity Monitor installation folder and open `sql.config` in a text editor.
4. Update the server name and service name:
   ```
   <servers>
   <server name="<server name used in FMLOGIN.INI>"><DbBrand value="SQLSERVER"/>
   <ServiceName value="<Name of the MSSQL Server Instance>"/>
   </server>
   </servers>
   ```

Database Maintenance (DBMaintenance)

1. Make sure the Microsoft .NET Framework is installed.
2. Make sure the databases to update are version 1448 or higher.
3. Depending on your operating system bits, extract the contents of `151222_myinventory_DBMaintenance (32-bit)_8.5.0.20.1560.zip` or `151222_myinventory_DBMaintenance (64-bit)_8.5.0.20.1560.zip`.
4. Double-click the extracted setup file and follow the instructions:
   a. Select the installation directory, such as C:\myinventory Database Maintenance (XX-bit)
   b. If you are using an Oracle Database server, select **Oracle** and then enter the **SQLNet Connection Name**.
   c. If you are using a Microsoft SQL server, select **SQL** and then enter the location of the **Driver File**.

Maximum Number of Parallel Database Updates

1. Navigate to Database Maintenance installation folder and open `fmlogin.ini` in a text editor.
2. Update the following parameter:
   ```
   [BatchUpdate]
   MaxThreads= Number of threads
   ```

Depending on your hardware configuration, you should enter a value between 10 and 30.

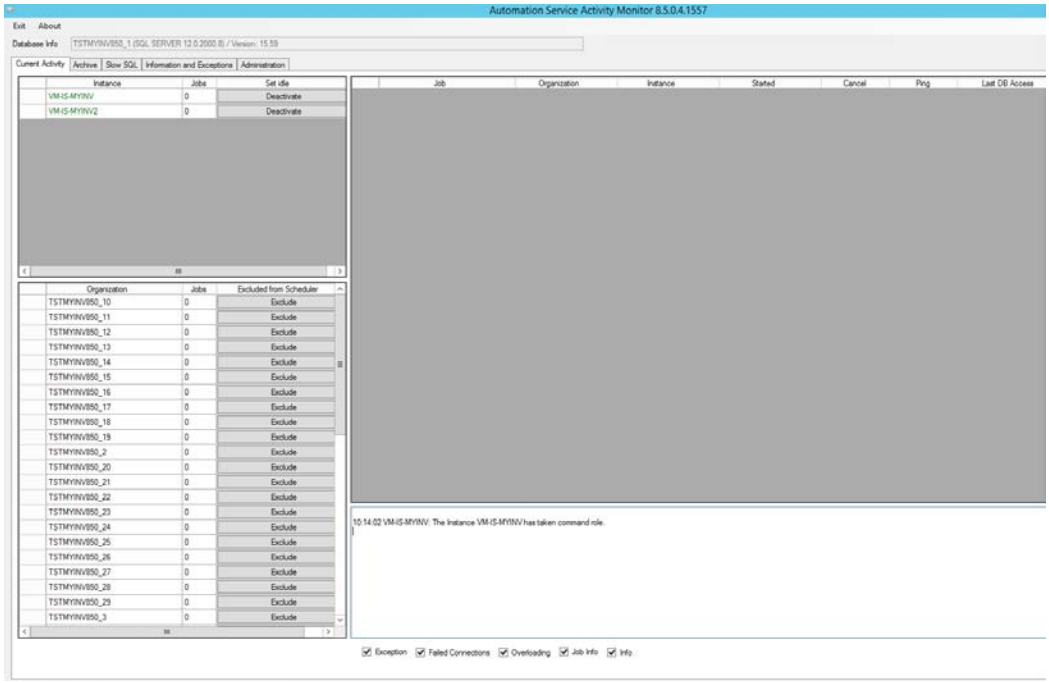
Server Name

5. Navigate to Database Maintenance installation folder and open `fmlogin.ini` in a text editor.
6. Enter the server name for all `DBLogin` parameter instances. For example:
   ```
   [BON]
   DBLogin=server name/BON/MICROS,BON,myinvenMenu.ini
   ```
7. If you are using a Microsoft SQL server, navigate to Database Maintenance installation folder and open `sql.config` in a text editor.
8. Update the server name and service name:
   ```
   <servers>
   <server name="<server name used in FMLOGIN.INI>"><DbBrand
   value="SQLSERVER"/>
   <ServiceName value="<Name of the MSSQL Server Instance>"/>
   </server>
   </servers>
   ```

Start the Inventory Management Services and Verify Installation

1. Start the **DGService**, **delegateSys.myinventoryAutomation2**, **WebClient**, and **myOrganization** services, and then log in to Inventory Management.
2. Run the AutomationService Console, make sure jobs are running in the AutomationService, and make sure sales booking is successful.
3. Review the logs for any errors.
4. See the *Oracle Hospitality Inventory Management Security Guide* for information and instructions regarding Inventory Management security.

3 Using and Configuring the Automation Service Activity Monitor



Top Left window

Instance:	All Servers running AutomationService Connecting to the Master database
	Red (not active) Green (Automation Service is running)
Jobs:	Current count of jobs running per Instance
Set idle:	Here you can deactivate / activate Instance from Load balancing pool

Button Left window

Organization:	Name of the organization configured in the Master Database
Jobs:	Current count of jobs running per Organization
Exc. from Scheduler:	Singe organization can be excluded from Scheduler

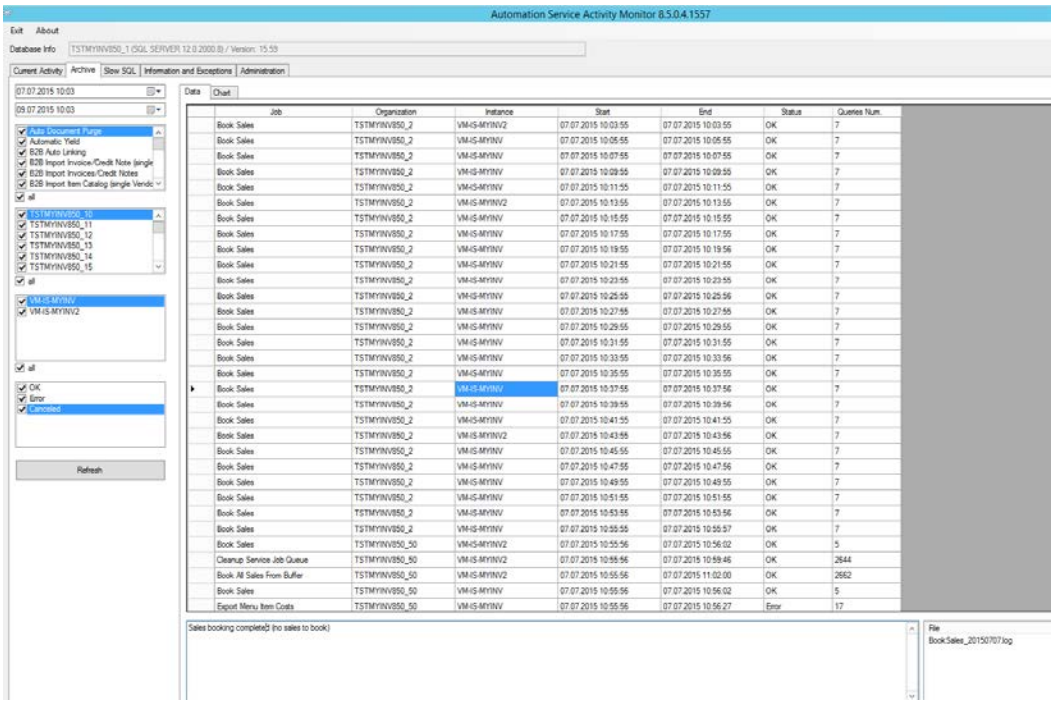
Top Right window

Job:	Current Running Job
Organization:	for what or is this job running
Instance:	on what Server is the job running
Started:	When have the job started
Cancel:	Action to cancel current running job
Ping:	Check if the job is responding
Last DB Access:	Date time of last Access to the DB of this job

Button Right Window

Log of finished jobs

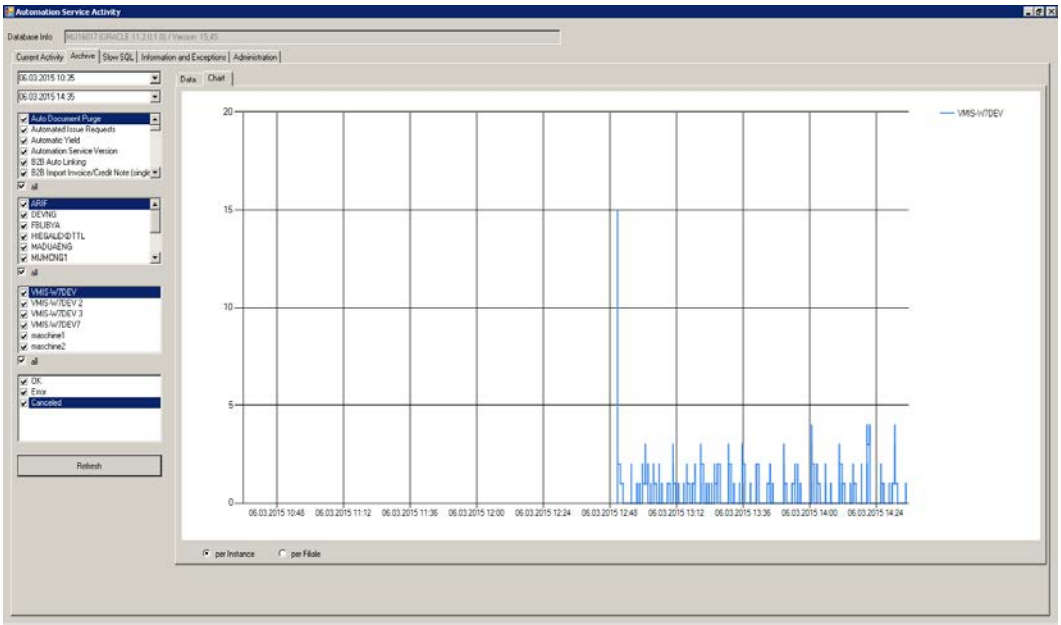
ArchiveTab



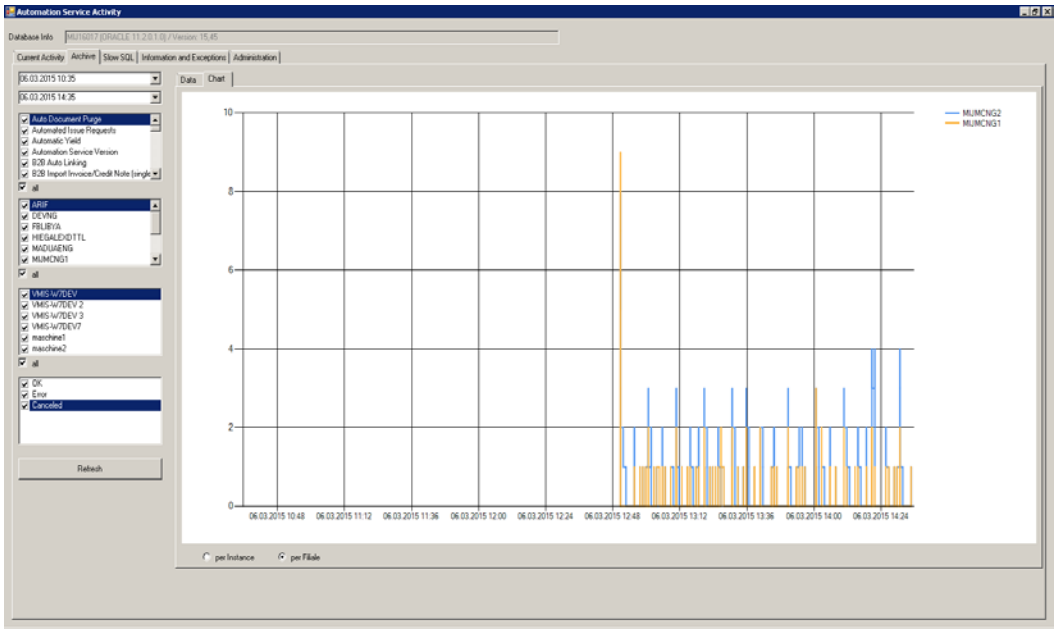
Here an Administrator can see based on the filters he have set on the left hand side the jobs that have been executed including start and end time status number of sql Queries fired against the db and access to the log written by this job by double clicking in the bottom right window on the log.

Second tab

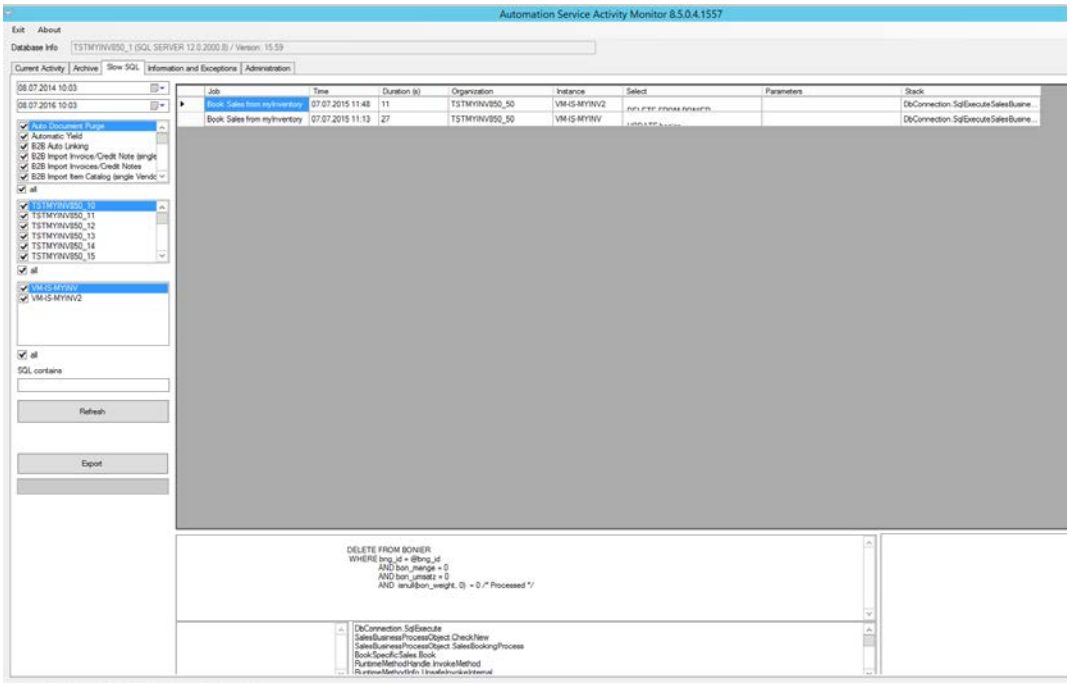
Time period is displayed on X axis, and Y axis can show number of executed jobs per AS



instance or organization (defined by radio-buttons on chart bottom). Each instance/organization has different color (legend available in upper right chart corner).



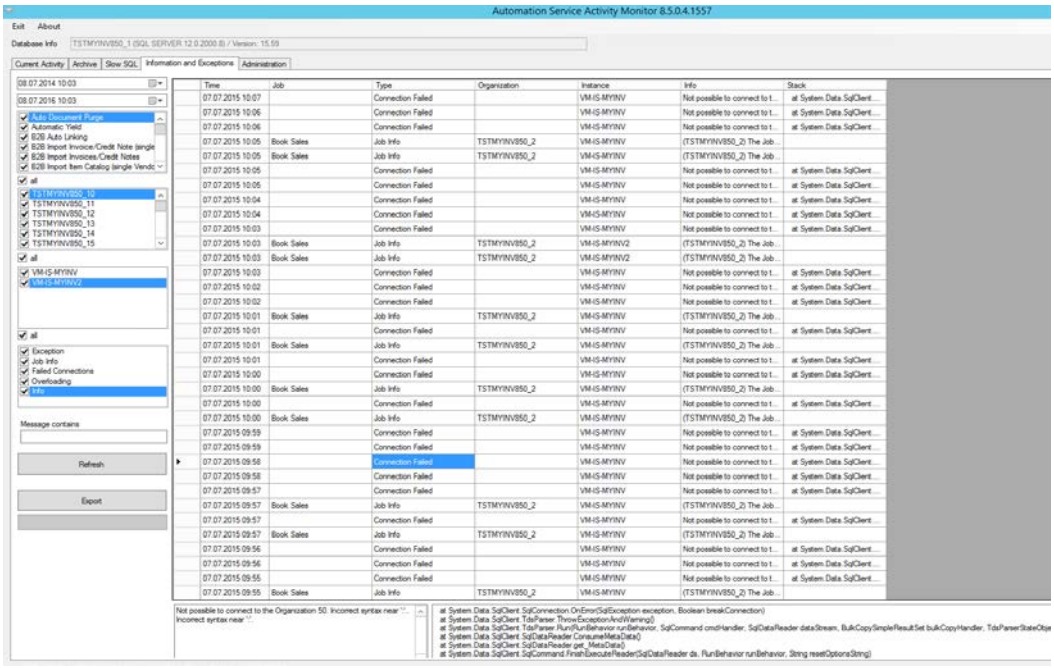
Slow SQL Tab



This tab shows information about SQL Statements that have exceeded a configured time in seconds for executing.

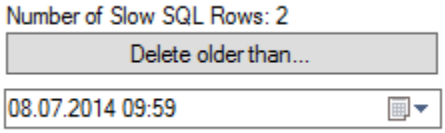
This tab is designed to assist Application and Database Administrators to identify slow running SQL Statements for tuning the Database or Application Servers.

Information and Exception Tab

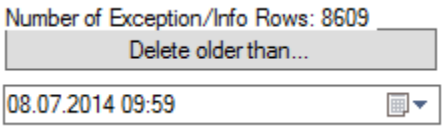


This Tab shows additional information about executed jobs their status, Failed Connections and Exceptions.
Message types can be:
Exceptions – program errors
Job Info – information about the jobs (started/finished)
General Info – server messages
Failed Connections – database connections lost
Server Overloading – when some actions are taking longer than expected.

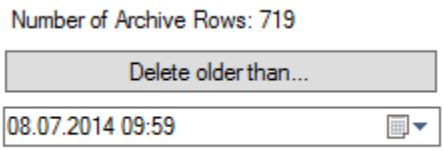
Administration tab



Count of rows in this table and the option to delete these rows if they are not needed anymore



Count of rows in Exception / Info table and the option to clean this table



Count of rows in archive table and the option to clean this table

Max. concurrent Jobs per Database Server

40

Maximum Numbers of Parallel running Jobs per Database Instance (Not Physical Server)

LOG SQLs with Duration greater than (seconds)

10

Configuration in Seconds for SQLs that should be logged in Slow SQL Tab

LOG Execution Plan for SQLs with Duration greater than (seconds)

60

Configuration in Seconds for SQLs where Execution plan should be logged

Max. size of Log and Archive Tables (rows)

100000

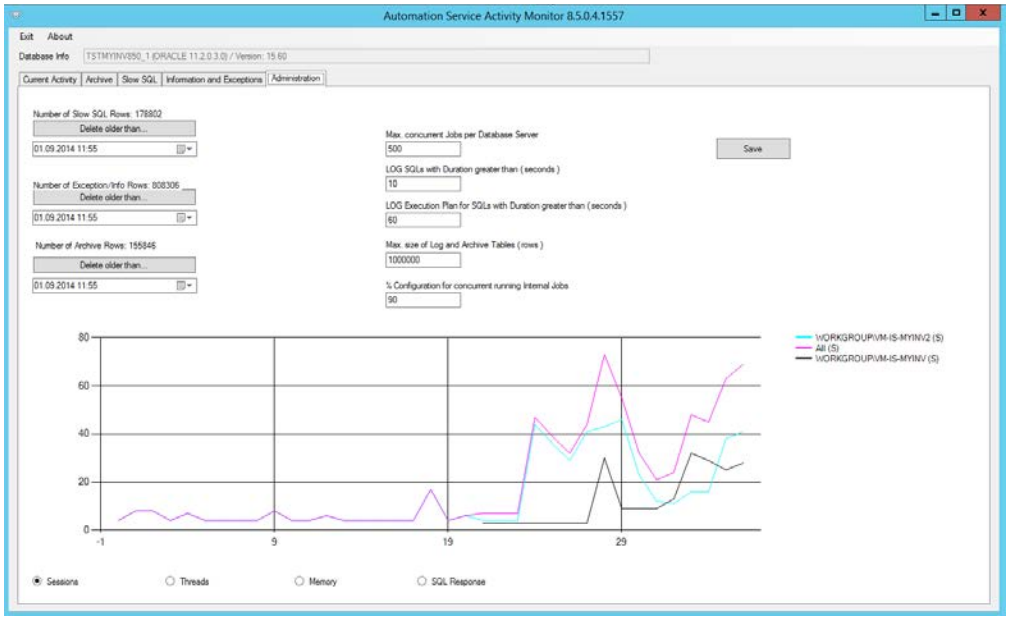
Max Size of Archive Table before system starts to erase records on his own

% Configuration for concurrent running Internal Jobs

0

Number of Concurrent running internal jobs allowed like Calculate Average usage job per Store

To have the Graphic below available the Oracle user for the Master database need to have read access to v$session View of the SYS User



Additional Configuration options for AutomationService

Inventory -> Maintenance -> Settings -> AUTOMATION

BOOKINGSALESJOBMAXCONCURRENT:	Maximum number of concurrent Booking Sales jobs. Default 10, maximum 50. Increase for processing large volume of sales.
BOOKSALESJOBINTERVAL:	Enter time in minutes, to wait between Booking Sales from Inventory Management jobs (Sales stuck in Buffer) running, when over 5000 records exist. Blank = Default of 5 minutes

AutomationService Instance Configured in AutomationService.exe.config

MaxThreadsForce:	If T, then AS will always tries to execute MaxThreads number of parallel jobs. If F, then AS will never exceed MaxThreads, but will try to calculate what is the best and then to work with that(default and recommended is F)

4 Enable Transport Layer Security (TLS) 1.2

Oracle recommends enabling and using the Transport Layer Security (TLS) 1.2 protocol on your server.

1. Start the registry editor by clicking on **Start** and **Run**. Enter `regedit` and then click **Run**.
2. Select **Computer** at the top of the registry tree. Backup the registry first by clicking **File** and then **Export**. Select a file location to save the registry file.

   Note: You will be editing the registry. This could have detrimental effects on your computer if done incorrectly, so it is strongly advised to make a backup.
3. Browse to the following registry key:
   `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\SecurityProviders\SCHANNEL\Protocols`
4. Right click the **Protocols** folder, click **New,** and then select **Key** from the drop-down menu. Rename the new folder to **TLS 1.2**.
5. Right click the **TLS 1.2** key and add two new keys underneath it.
6. Rename the two new keys as:
   - Client
   - Server
7. Right click the **Client** key, click **New,** and then select **DWORD (32-bit) Value** from the drop-down list.
8. Rename the **DWORD** to **DisabledByDefault**.
9. Right-click **DisabledByDefault** and click **Modify** from the drop-down menu.
10. Ensure that the **Value** data field is set to **0** and the **Base** is **Hexadecimal**. Click **OK**.
11. Create another **DWORD** for the **Client** key.
12. Rename the new **DWORD** key to **Enabled**.
13. Right-click **Enabled** and click **Modify** from the drop-down menu.
14. Ensure that the **Value** data field is set to **1** and the **Base** is **Hexadecimal**. Click **OK**.
15. Repeat steps **7** to **14** for the **Server** key (by creating two DWORDs, **DisabledByDefault** and **Enabled**, and their values underneath the **Server** key).
16. Reboot the server.