

Bed Management Solution (BMS)

Technical Manual



January 2020

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1 Introduction

1.1 Purpose

This document is designed to provide sufficient technical information about the Bed Management Solution (BMS) application to the developers and Information Resources Management (IRM) technical personnel to operate and maintain the software.

1.2 BMS Overview

BMS is a real-time, user-friendly Web-based Veterans Health Information Systems and Technology Architecture (VistA) interface for tracking patient movement, bed status and bed availability. It provides performance information that can be used to improve patient flow within, and between, VA Medical Centers (VAMCs).

BMS allows administrative and clinical staff to record, manage and report on the planning, patient-movement, patient occupancy, and other activities related to management of beds. All patient admission, discharge, and transfer movements are sent directly from VistA to BMS.

BMS offers the following features:

- Tracks patient movement through the system;
- Displays patient and bed occupancy status for all beds in the facility and/or Veterans Integrated Service Networks (VISN);
- Provides visibility of bed availability within VAMC's to support emergency management;
- Automates request and assignment of beds;
- Displays and facilitates timely discharge appointments;
- Supports and facilitates efficient flow operations and is a catalyst to process improvement and best practices;
- Provides reports on performance measures associated with bed management and patient flow.

BMS provides answers to the following questions:

- How many beds do we have?
- How many empty beds do we have?
- How many available female beds do we have?
- How many beds are out of service and why?
- How long does it take to clean a bed?
- How many patients are waiting for beds in community hospitals?
- How many admissions, transfers, and discharges did my unit have yesterday?
- How many discharges will we have tomorrow?
- How many scheduled admissions do we have for today?

1.3 References

Requirements Specification Document (CLIN: 0002AA; title: Requirements Specification Document; file: Bed Management Solution (BMS) Technical Manual

2 Implementation and Maintenance

2.1 BMS Infrastructure Diagram

The BMS application has a list of physical components that can be divided on more physical servers according with their roles.

The following diagram represents a possible schema of physical deployment.

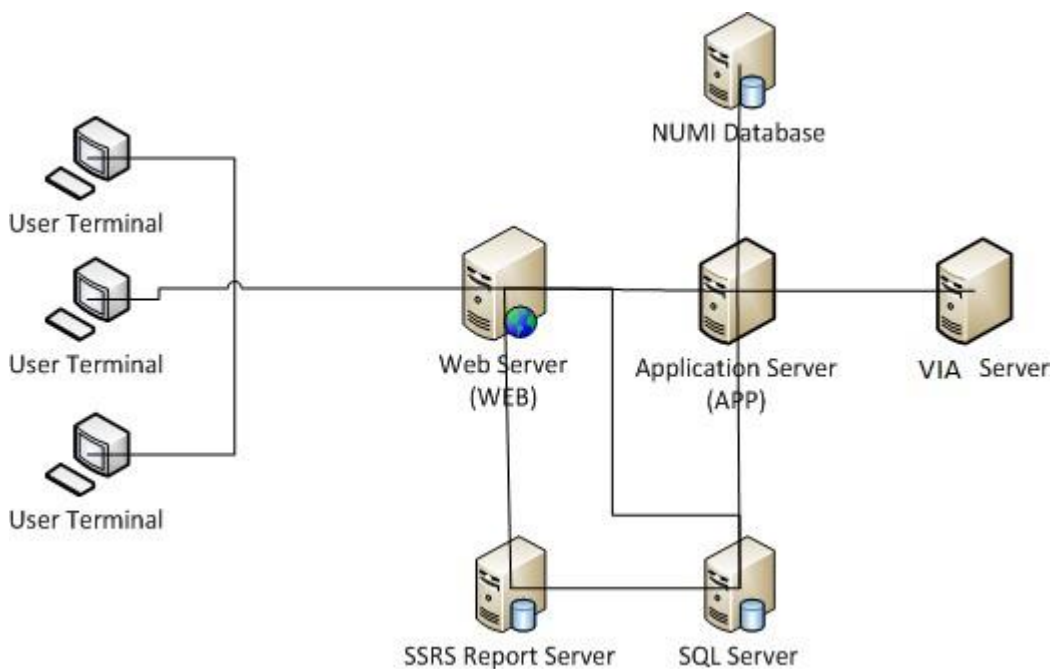


Figure 1-BMS Infrastructure Diagram

BMS is divided into specific components:

1. Persistence layer: SQL Server 2016 Enterprise database
2. Application server layer: Windows Communication Foundation (WCF) Web Services installed as Windows Services
3. Web server layer: Active Server Pages (ASP) .NET Model-View-Controller (MVC) Web application hosted in Internet Information Services (IIS)
4. Data Exchange Servers:
 - a. National Utilization Management Integration (NUMI) SQL Server Database
 - b. VistA integration servers (servers that have access to VistA)

5. Client Layer: Web Application client launched from browsers

2.2 System Requirements (Hardware and Software)

BMS requires the creation of a Master Windows Service Account User and numerous facility/Site Service Account Users for execution and operations.

All the BMS Application Services run under a service account.

- AITC has created the Windows User (acc\VAAACBMSPrd) as the master service account that the four BMS Services runs under. This can be referred to as the Master BMS Service Account.
- The <SERVERADDRESS>210 server hosts the three application services:
 - BMS.BedManagerService
 - BMS.SecurityHost
 - BMS.ServiceHost
- The <ServerAddress>211 server hosts the two application services:
 - BMS.VI.ServiceHost.
 - BMS.ServiceHost

All BMS Facilities/Sites require at least one service account for certain site functionality.

- This service account will run the EMS Mobile Page and Whiteboard Kiosk Page functions.
- Under BMS version 1.xx a single service account can be used for both functions.
- The service account that runs the EMS Mobile Page and Whiteboard Kiosk Page functions must not have any Policies assigned that restrict its use to specific computers.

BMS minimum hardware and software requirements are presented below:

Table 1-Server for Web Applications

| | |
|-----------------------|---|
| Basic software: | Microsoft Windows Server 2012 64 bit R2 Standard Microsoft Clustering Services 2008 IIS 7.5 ASP.NET MVC5 .NET Framework 4.6.1 |
| Application software: | Dashboards web application |
| Processor(s): | 16 x Intel Xeon E5520 or equivalent |
| Memory: | 32 GB |
| Hard disks: | 190 GB |
| Network controller: | Broadcom NetXtreme Gigabit Ethernet, or equivalent |

Table 2-Application Server

| Server 1 | |
|-----------------------|--|
| Basic software: | Microsoft Windows Server 2012 64 bit R2 Standard .NET Framework 4.6.1 |
| Application software: | EIS, EVS, DS, BMS InFlow |

| | |
|------------------------------|--|
| Processor(s): | 14 x Intel Xeon E5520 or equivalent |
| Memory: | 65 GB |
| Hard disks: | 190 GB |
| Network controller: | Broadcom NetXtreme Gigabit Ethernet, or equivalent |
| Server 2 | |
| Basic software: | Microsoft Windows Server 2012 64 bit R2 Standard .NET Framework 4.6.1 |
| Application software: | EIS, EVS, DS, BMS InFlow |
| Processor(s): | 12 x Intel Xeon E5520 or equivalent |
| Memory: | 65 GB |
| Hard disks: | 210 GB |
| Network controller: | Broadcom NetXtreme Gigabit Ethernet, or equivalent |

Table 3-Database Server

| | |
|------------------------------|--|
| Basic software: | Microsoft Windows Server 2012 64 bit R2 Standard Microsoft SQL Server 2016 Enterprise .NET Framework 4.6.1 |
| Application software: | Databases used by the services installed on APP |
| Processor(s): | 32 x Intel Xeon E5520 or equivalent |
| Memory: | 136 GB |
| Hard disks: | 1500 GB |
| Network controller: | Broadcom NetXtreme Gigabit Ethernet, or equivalent |

2.3 Configuration Parameters

This section describes configuration parameters of the BMS application.

Table 4-BMS ServiceHost Configuration Parameters

| Section | Configuration Key/Name | Configuration values (ex.) | | | Description |
|--------------------------|---|--|--|---|---|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| configSections | mtmodules | type="ePractice.MiddleTier.MTModuleSectionHandler, MiddleTier" | | | |
| | enterpriselibrary.configurationSettings | type="ePractice.Configuration.ConfigurationManagerSectionHandler, MS.Configuration" | | | |
| | pagingSortGroup | type="BMS.Util.PagingSortSection, BMS.Util" allowDefinition="Everywhere" allowExeDefinition="MachineToApplication" restartOnExternalChanges="true" | | | |
| | log4net | type="log4net.Config.Log4NetConfigurationSectionHandler,log4net" | | | |
| connectionStrings | Authorization | connectionString="Data Source=<DatabaseAddress>;Network Library=DBMSSOCN;Initial Catalog=BMS;Persist Security Info=False;Integrated Security=SSPI;Pooling=true;Min Pool Size=0;Max Pool Size=250;" | connectionString="Data Source=<DatabaseAddress>;Network Library=DBMSSOCN;Initial Catalog=BMS;Persist Security Info=False;Integrated Security=SSPI;Pooling=true;Min Pool Size=0;Max Pool Size=250;" | connectionString="Data Source=<DatabaseAddress>;Initial Catalog=BMS;Persist Security Info=False;Integrated Security=SSPI;Pooling=true;Min Pool Size=0;Max Pool Size=100;" | Connection string for the connection to the BMS database. |
| | | | | | |
| | | | | | |
| appSettings | DatasetPath | value="DBRepository" | | | |
| | LocalServer | value="yes" | | | |
| | UseSecurityContext | value="1" | | | Security - Authorization |
| | ePractice.MiddleTier.Transaction | value="MiddleTier.dll" | | | |
| | ConnectionRef | value="1" | | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|--------------------------------------|--|-------------------------------|---|
| | | Split Service | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | TransactionProvider | value="ePractice.MiddleTier.CustomTransactionProvider" | | |
| | VistaWorker.WorkerDelay TimeSpan | value="0:0:0:30" | | Delay time from service start to first processing |
| | VistaWorker.WorkerPeriod TimeSpan | value="0:0:0:15" | | Period between worker processing steps |
| | VistaWorker.BulkSize | value="100" | | Maximum number of processed entities in one step |
| | VistaWorker.Enabled | N/A (No longer used) | | Whether vista |

| Section | Configuration Key/Name | Configuration values (ex.) | | | Description |
|---------|---------------------------------------|----------------------------|-------------------------------|------------------------|---|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | | | | | worker is enabled or not (true or false) |
| | VistaIntegration.Enabled | value="false" | value="true" | value="true" | Whether vista integration is enabled or not (true or false) |
| | VistaIntegration.SchedulerSecondsLate | value="30" | | | The time delay of schedulers |
| | VistaIntegration.UpdateBmsPatients | value="true" | | | Whether update bms patients is enabled |

| Section | Configuration Key/Name | Configuration values (ex.) | | | Description |
|---------|--------------------------------|----------------------------|-------------------------------|------------------------|--|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | | | | | led or not (true or false) |
| | Smtphost | value="smtp.va.gov" | value="smtp.va.gov" | value="localhost" | smtp host |
| | VistaWorker.VistASitesFilePath | value="VistASites.xml" | | | The vista sites configuration filename |
| | VistasBedHoldSupported | N/A | | | List of vista sites that support bed hold. |
| | visitorAppPwd | value="UM" | | | Password used by MDWS to connect to VistA. |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|------------------------|----------------------------|-------------------------------|--|
| | | Split Service | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | visitorUserSiteCode | value="523" | | User Site Code used by MDWS to connect to VistA. |
| | visitorUserName | < visitorUserName > | | User Name used by MDWS to connect to VistA. |
| | visitorUserDuz | value="<visitorUserDuz >" | | User Duz used by MDWS to connect to VistA. |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|------------------------|----------------------------|-------------------------------|---|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | visitorUserSsn | value="<visitorUserSsn >" | | User SSN used by MDWS to connect to VistA. |
| | visitorContext | value="<visitorContext >" | | Context used by MDWS to connect to VistA. |
| | UsingNewMdwsMethods | value="true" | | Whether use new mdws methods for vista integration (true or |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|-------------------------------------|----------------------------|-------------------------------|---|
| | | Split Service | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | | | | false) |
| | BMS_EIS_GET_ENTITY_FILTER_PAGE_SIZE | value="1000" | | Number of records queried that are brought from EIS in one page . |
| | BMS_EVS_GET_CONCEPT_PAGE_SIZE | value="1000" | | Number of records queried that are brought from EVS in one page . |
| | Changeset | value="72898" | | Changeset of |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|-----------------------------|--------------------------------------|-------------------------------|---|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | | | | the installed build. |
| | NumiSvcAuthenticationKey | value="<NumiSvcAuthenticationKey > " | | NUM I service authentication key. |
| | NumiMaxNumberOfSitesPerCall | value="5" | | Maximum number of sites that NUM I processes in one call. |
| | Is_IIS_Single_Instance | value="true" | | Whether use SSL endpoint from configuration file. (true |

| Section | Configuration Key/Name | Configuration values (ex.) | | | Description |
|---------|-----------------------------------|----------------------------|---|--|---|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | | | | | or false) |
| | UseCacheEndpointFromConfigWithSsl | value="true" | | | Whether use SSL endpoint from configuration file. |
| | ProxyPoolMaxCount | value="1000" | value="50" | value="1000" | The maximum number of proxies in the pool. |
| | VistaIntegrationJobFailedMaxCount | value="25" | <pre><add key="MdwsEndpointUrl_DFLT" value="http://vaausbmsweb26:87/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_R1" value="http://vaausbmsweb26:88/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_R2" value="http://vaausbmsweb26:89/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_R3"</pre> | value="http://localhost:82/QuerySvc.asmx" value="http://localhost:82/QuerySvc.asmx" | MDWS instance URL address. |

| Section | Configuration Key/Name | Configuration values (ex.) | | | Description |
|---------|------------------------|----------------------------|---|------------------------|-------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | | | <pre> value="http://vaausbmsweb26:90/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_R4" value="http://vaausbmsweb26:91/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V1" value="http://vaausbmsweb26:92/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V2" value="http://vaausbmsweb26:93/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V3" value="http://vaausbmsweb26:94/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V4" value="http://vaausbmsweb26:95/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V5" value="http://vaausbmsweb26:96/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V6" value="http://vaausbmsweb26:97/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V7" value="http://vaausbmsweb26:98/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V8" value="http://vaausbmsweb26:99/QuerySvc.asmx"/> <add </pre> | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | | Description |
|---------|------------------------|---|-------------------------------|------------------------|-------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | | <pre> key="MdwsEndpointUrl_V9" value="http://vaausbmsweb26:100/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V10" value="http://vaausbmsweb26:101/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V11" value="http://vaausbmsweb26:102/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V12" value="http://vaausbmsweb26:103/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V13" value="http://vaausbmsweb26:104/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V14" value="http://vaausbmsweb26:105/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V15" value="http://vaausbmsweb26:106/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V16" value="http://vaausbmsweb26:107/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V17" value="http://vaausbmsweb26:108/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V18" value="http://vaausbmsweb26:109/QuerySvc.asmx"/> </pre> | | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | | Description |
|---------|------------------------|---|-------------------------------|------------------------|-------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | | <pre> <add key="MdwsEndpointUrl_V19" value="http://vaausbmsweb26:110/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V20" value="http://vaausbmsweb26:111/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V21" value="http://vaausbmsweb26:112/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V22" value="http://vaausbmsweb26:113/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_V23" value="http://vaausbmsweb26:114/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_GLA" value="http://vaausbmsweb26:115/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_LAS" value="http://vaausbmsweb26:116/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_LOM" value="http://vaausbmsweb26:117/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_LON" value="http://vaausbmsweb2 </pre> | | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | | Description |
|---------|------------------------|----------------------------|---|------------------------|-------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | | | <pre> 6:118/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_SDC" value="http://vaausbmsweb2 6:119/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_KAN" value="http://vaausbmsweb2 6:120/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_STL" value="http://vaausbmsweb2 6:121/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_NFL" value="http://vaausbmsweb2 6:122/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_WP B" value="http://vaausbmsweb2 6:123/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_BAY" value="http://vaausbmsweb2 6:124/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_MIA" value="http://vaausbmsweb2 6:125/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_ORL" value="http://vaausbmsweb2 </pre> | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|------------------------|----------------------------|--|-------------|
| | | Split Service | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | |
| | | | <pre> 6:126/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_SAJ" value="http://vaausbmsweb2 6:127/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_TAM" value="http://vaausbmsweb2 6:128/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RS V1" value="http://vaausbmsweb2 7:87/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RS V2" value="http://vaausbmsweb2 7:88/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RS V3" value="http://vaausbmsweb2 7:89/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RS V4" value="http://vaausbmsweb2 7:90/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RS V5" value="http://vaausbmsweb2 7:91/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RS V6" </pre> | |

| Section | Configuration Key/Name | Configuration values (ex.) | | | Description |
|---------|------------------------|----------------------------|--|------------------------|-------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | | | <pre> value="http://vaausbmsweb27:92/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RS V7" value="http://vaausbmsweb27:93/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RS V8" value="http://vaausbmsweb27:94/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RS V9" value="http://vaausbmsweb27:95/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RS V10" value="http://vaausbmsweb27:96/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RS V11" value="http://vaausbmsweb27:97/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RS V12" value="http://vaausbmsweb27:98/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RS V13" value="http://vaausbmsweb27:99/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RS </pre> | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | | Description |
|---------|------------------------|----------------------------|--|------------------------|-------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | | | <pre> 14" value="http://vaausbmsweb27:100/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RSV14" value="http://vaausbmsweb27:101/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RSV15" value="http://vaausbmsweb27:102/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RSV16" value="http://vaausbmsweb27:103/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RSV17" value="http://vaausbmsweb27:104/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RSV18" value="http://vaausbmsweb27:105/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RSV19" value="http://vaausbmsweb27:106/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RSV20" value="http://vaausbmsweb27:107/QuerySvc.asmx"/> <add </pre> | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|------------------------|--|-------------------------------|------------------------|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | | <pre> key="MdwsEndpointUrl_RSV 21" value="http://vaausbmsweb2 7:108/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RSV 22" value="http://vaausbmsweb2 7:109/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RSV 23" value="http://vaausbmsweb2 7:110/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RSV 24" value="http://vaausbmsweb2 7:111/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RSV 25" value="http://vaausbmsweb2 7:112/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RSV 26" value="http://vaausbmsweb2 7:113/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_RSV 27" value="http://vaausbmsweb2 7:114/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_GLA 27" value="http://vaausbmsweb2 7:115/QuerySvc.asmx"/> </pre> | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|------------------------|----------------------------|--|------------------------|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | | | <pre> <add key="MdwsEndpointUrl_LAS27" value="http://vaausbmsweb27:116/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_LOM27" value="http://vaausbmsweb27:117/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_LON27" value="http://vaausbmsweb27:118/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_SDC27" value="http://vaausbmsweb27:119/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_KAN27" value="http://vaausbmsweb27:120/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_STL27" value="http://vaausbmsweb27:121/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_NFL27" value="http://vaausbmsweb27:122/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_WP B27" value="http://vaausbmsweb2 </pre> | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|---|----------------------------|--|---|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | | | <pre> 7:123/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_BAY 27" value="http://vaausbmsweb2 7:124/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_MIA 27" value="http://vaausbmsweb2 7:125/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_ORL 27" value="http://vaausbmsweb2 7:126/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_SAJ 27" value="http://vaausbmsweb2 7:127/QuerySvc.asmx"/> <add key="MdwsEndpointUrl_TAM 27" value="http://vaausbmsweb2 7:128/QuerySvc.asmx"/> </pre> | |
| | VistaIntegrationJobFailedIncrementDateMinutes | value="10" | | The maximum number of job failures until the system |

| Section | Configuration Key/Name | Configuration values (ex.) | | Descript ion |
|---------|--|--|--------------------------------|--|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.c onfig | BMS.ServiceHost.config |
| | | | | decides to retry. |
| | VistaIntegrationJobFailedNotificationEmailTo | | | The time span (minutes) that the system decides to increment job's start date when the threshold of job failures is reached. |
| | VistaIntegrationJobFailedNotificationEmailFrom | value="BMSBackgroundProcessorAgent@va.gov" | | Recipient's email used when a |

| Section | Configuration Key/Name | Configuration values (ex.) | | | Description |
|---------|--|----------------------------|-------------------------------|------------------------|--|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | | | | | job fails. (va_pers on@ va.g ov) |
| | BMS_EIS_LongRunningMethodsMaxConcurrentCalls | value="100" | | | Sender's email used when a job fails. |
| | BMS_EVS_LongRunningMethodsMaxConcurrentCalls | value="100" | value="75" | value="75" | |
| | BMSServiceHostStartType | value="BMS" | value="100" | value="50" | |
| | VistaIntegration.TaskSchedulerDelayMin | value="0" | value="BMS.VI" | value="ALL" | Identifies how BMS is ran and the associate configuration file. (possible valu |

| Section | Configuration Key/Name | Configuration values (ex.) | | | Description |
|-----------------------------------|---|--|---|---|--|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | | | | | es: ALL, BMS , BMS .VI) |
| | VistaIntegration.TaskSchedulerDelayMax | value="10" | value="0" | value="0" | |
| | VistaIntegration.TaskSchedulerDelayStep | value="5" | value="10" | value="10" | |
| | ThreadPoolMaxWorkerThreads | | value="5" | value="5" | |
| | VistaIntegration.PatientMovementlenDays | | | value="200" | |
| | ViaEndpointUrl | | value="60" | value="60" | |
| | ViaRequestingApp | | value="https://REDACTED.via.va.gov/via-webservices/services/BackgroundProcessService" | value="https://REDACTED.via.va.gov/via-webservices/services/BackgroundProcessService" | URL for VIA |
| | ViaAppToken | | value="BMSBatch" | value="BMSBatch" | |
| | ViaAppPassword | | value="BMSB_ID577" | value="BMSB_ID577" | |
| | MinimumFilemanDate | | value="*****" | Value="*****" | |
| | | | Value="01/01/1992" | Value="01/01/1992" | |
| | sortColumnCode="entered" | sortColumnName="[A].[CREATION_DATE]" | | | |
| pagingSortGroup/pagingSort | sortColumnCode="patient" | sortColumnName="[PAT].[LAST_NAME], [PAT].[FIRST_NAME]" | | | |
| | sortColumnCode="facility" | sortColumnName="[F].[NAME]" | | | |
| | sortColumnCode="requestdt" | sortColumnName="[A].[CREATION_DATE]" | | | |
| | sortColumnCode="specialty" | sortColumnName="[REQSP].[DISPLAY_NAME]" | | | |
| | sortColumnCode="visn" | sortColumnName="[TR].[FACILITY_VISN]" | | | |
| | sortColumnCode="region" | sortColumnName="[TR].[FACILITY_REGION]" | | | |
| | sortColumnCode="eventdt" | sortColumnName="[AEVN].[CREATION_DATE]" | | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|--|---|--|-------------------------------|------------------------|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | " | | | |
| | sortColumnCode="VacatedDate" | sortColumnCode="VacatedDate" | | |
| | sortColumnCode="transfer eventdt" | sortColumnName="[A].[CREATION_DATE]" | | |
| | sortColumnCode="transfer requestdt" | sortColumnName="[TR].[REQUESTED_DATE]" | | |
| | assembly="General.MT.dll" | servername="" | | |
| mtmodules [defaultserver=""] | assembly="BMS.MT.dll" | servername="" | | |
| | configurationSections\configurationSection xsi:type="ReadOnlyConfigurationSectionData" name="securityConfiguration" encrypt="false" | storageProvider xsi:type="XmlFileStorageProviderData" name="XML File Storage Provider" path="securityConfiguration.config" | | |
| enterpriselibrary.configuration Settings xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" applicationName="HMSI" xmlns="http://www.microsoft.com/practices/enterpriselibrary/0 | configurationSections\configurationSection xsi:type="ReadOnlyConfigurationSectionData" name="securityConfiguration" encrypt="false" configurationSections\configurationSection xsi:type="ReadOnlyConfigurationSectionData" name="cachingConfiguration" encrypt="false" | <pre> <dataTransformer xsi:type="XmlSerializerTransformerData" name="Xml Serializer Transformer"> <includeTypes> <includeType name="HMUserAccessAuthenticationProviderData" type="ePractice.Security.HMUserAccess.Configuration.HMUserAccessAuthenticationProviderData, Security.HMUserAccess"/> <includeType name="HMUserAccessAuthorizationProviderData" type="ePractice.Security.HMUserAccess.Configuration.HMUserAccessAuthorizationProviderData, Security.HMUserAccess"/> <includeType name="HMUserAccessRolesProviderData" type="ePractice.Security.HMUserAccess.Configuration.HMUserAccessRolesProviderData, Security.HMUserAccess"/> <includeType name="NullAuthenticationProviderData" type="ePractice.Security.Null.Configuration.NullAuthenticationProviderData, Security.Null"/> <includeType name="NullAuthorizationProviderData" type="ePractice.Security.Null.Configuration.NullAuthorizationProviderData, Security.Null"/> </includeTypes> </dataTransformer> </pre> | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|-------------------------|---|--|-------------------------------|-------------------------------------|
| | | Split Service | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| 8-31-2004/configuration | | storageProvider xsi:type="XmlFileStorageProviderData" name="XML File Storage Provider" path="cachingConfiguration.config" | | |
| | configurationSections\configurationSection xsi:type="ReadOnlyConfigurationSectionData" name="cachingConfiguration" encrypt="false" | <dataTransformer xsi:type="XmlSerializerTransformerData" name="Xml Serializer Transformer"> <includeTypes/> </dataTransformer> | | Caching configuration is for CLIENT |
| | configurationSections\configurationSection xsi:type="ReadOnlyConfigurationSectionData" name="connectionConfiguration" encrypt="false" | storageProvider xsi:type="XmlFileStorageProviderData" name="XML File Storage Provider" path="connectionConfiguration.config" | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|-------------------------------------|--|--|---|--|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | configurationSections\configurationSection xsi:type="ReadOnlyConfigurationSectionData" name="connectionConfiguration" encrypt="false" keyAlgorithmStorageProvider | <pre><dataTransformer xsi:type="XmlSerializerTransformerData" name="Xml Serializer Transformer"> <includeTypes> <includeType name="ServicesDatabaseConnectionProviderData" type="ePractice.Connection.SingleDatabase.Configuration.ServicesDatabaseConnectionProviderData, Connections.SingleDatabase, Version=1.0.0.0, Culture=neutral, PublicKeyToken=null"/> </includeTypes> </dataTransformer></pre> | | Connection configuration is for SERVER |
| | xsi:nil="true" | | | |
| | application\channels\channel | type="System.Runtime.Remoting.Channels.Tcp.TcpChannel, System.Runtime.Remoting, Version=1.0.5000.0, Culture=neutral, PublicKeyToken=b77a5c561934e089" name="RegularChannel" | | |
| system.runtime.remoting | connectionManagement\add | address="*" maxconnection="1000" | | |
| system.net | service | name="BMS.ServiceImplementation.BedManagerOperationsCore" behaviorConfiguration="ServiceBehavior" | | |
| system.serviceModel\services | host\base\baseAddresses\add | baseAddress="http://<ServerAddress>25:16050/BMSOperations" | | |
| | endpoint | address="" bindingConfiguration="ServiceBinding" binding="wsFederationHttpBinding" contract="BMS.ServiceContracts.IBedManagerOperations" | baseAddress="http://<ServerAddress>211:16050/BMSOperations" | baseAddress="http://localhost:16050/BMSOperations" |
| | endpoint | address="win" bindingConfiguration="WinBinding" binding="wsFederationHttpBinding" contract="BMS.ServiceContracts.IBedManagerOperations" | | |
| | endpoint | contract="IMetadataExchange" binding="mexHttpBinding" address="mex" | | |
| | endpoint | address="unsec" binding="basicHttpBinding" contract="BMS.ServiceContracts.IBedManagerOperations" | | |
| | service | name="BMS.ServiceImplementation.BedManagerQueryCore" behaviorConfiguration="ServiceBehavior" | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|-----------------------------|--|--|--|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | host\base\baseAddresses\add | baseAddress="http://<ServerAddress>210:16050/BMSQuery" | | |
| | endpoint | address="" bindingConfiguration="ServiceBinding" binding="wsFederationHttpBinding" contract="BMS.ServiceContracts.IBedManagerQuery" | baseAddress="http://<ServerAddress>211:16050/BMSQuery" | baseAddress="http://localhost:16050/BMSQuery" |
| | endpoint | address="win" bindingConfiguration="WinBinding" binding="wsFederationHttpBinding" contract="BMS.ServiceContracts.IBedManagerQuery" | | |
| | endpoint | contract="IMetadataExchange" binding="mexHttpBinding" address="mex" | | |
| | endpoint | address="unsec" binding="basicHttpBinding" contract="BMS.ServiceContracts.IBedManagerQuery" | | |
| | service | name="BMS.ServiceImplementation.BedManagerCacheCore" behaviorConfiguration="ServiceBehavior" | | |
| | host\base\baseAddresses\add | | | |
| | endpoint | | baseAddress="http://<ServerAddress>211:16050/BMSCache" | baseAddress="http://localhost:16050/BMSCache" |
| | endpoint | | address="" bindingConfiguration="ServiceBinding" binding="wsFederationHttpBinding" contract="BMS.ServiceContracts.IBedManagerCache" | address="" bindingConfiguration="ServiceBinding" binding="wsFederationHttpBinding" contract="BMS.ServiceContracts.IBedManagerCache" |
| | endpoint | | address="win" bindingConfiguration="WinBinding" binding="wsFederationHttpBinding" contract="BMS.ServiceContracts.IBedManagerCache" | address="win" bindingConfiguration="WinBinding" binding="wsFederationHttpBinding" contract="BMS.ServiceContracts.IBedManagerCache" |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|-----------------------------|---|---|---|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | endpoint | | contract="IMetadataExchange" binding="mexHttpBinding" address="mex" | contract="IMetadataExchange" binding="mexHttpBinding" address="mex" |
| | service | name="BMS.ServiceImplementation.ConfigurationOperationsCore" behaviorConfiguration="ServiceBehavior" | address="unsec" binding="basicHttpBinding" contract="BMS.ServiceContracts.IBedManagerCache" | address="unsec" binding="basicHttpBinding" contract="BMS.ServiceContracts.IBedManagerCache" |
| | host\base\baseAddresses\add | baseAddress="http://<ServerAddress>210:16050/BMSConfigurationOperations" | | name="BMS.ServiceImplementation.ConfigurationOperationsCore" behaviorConfiguration="ServiceBehavior" |
| | endpoint | address="" bindingConfiguration="ServiceBinding" binding="wsFederationHttpBinding" contract="BMS.ServiceContracts.IConfigurationOperations" | | baseAddress="http://localhost:16050/BMSConfigurationOperations" |
| | endpoint | address="win" bindingConfiguration="WinBinding" binding="wsFederationHttpBinding" contract="BMS.ServiceContracts.IConfigurationOperations" | | address="" bindingConfiguration="ServiceBinding" binding="wsFederationHttpBinding" contract="BMS.ServiceContracts.IConfigurationOperations" |

| Section | Configuration Key/Name | Configuration values (ex.) | | | Description |
|---------|-----------------------------|--|-------------------------------|---|-------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | endpoint | contract="IMetadataExchange" binding="mexHttpBinding" address="mex" | | address="win" bindingConfiguration="WinBinding" binding="wsFederationHttpBinding" contract="BMS.ServiceContracts.IConfigurationOperations" | |
| | endpoint | address="unsec" binding="basicHttpBinding" contract="BMS.ServiceContracts.IConfigurationOperations" | | contract="IMetadataExchange" binding="mexHttpBinding" address="mex" | |
| | service | name="InfoWorld.Security.Authorization.AuthorizationSubscriber.AuthorizationSubscriber" behaviorConfiguration="ServiceBehavior" | | address="unsec" binding="basicHttpBinding" contract="BMS.ServiceContracts.IConfigurationOperations" | |
| | host\base\baseAddresses\add | baseAddress="http://<ServerAddress>210:16050/BMS/AuthorizationSubscriber" | | name="InfoWorld.Security.Authorization.AuthorizationSubscriber.AuthorizationSubscriber" behaviorConfiguration="ServiceBehavior" | |
| | endpoint | address="" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" contract="InfoWorld.Security.Authorization.AuthorizationSubscriber.IAuthorizationSubscriber" | | baseAddress="http://localhost:16050/BMS/AuthorizationSubscriber" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Descript ion |
|---------|---------------------------------|----------------------------|--|--|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.c onfig | BMS.ServiceHost.config |
| | service | | | address="" binding="wsFederationHttp Binding" bindingConfiguration="Win Binding" contract="InfoWorld.Security.Authorization.AuthorizationSubscriber.IAuthorizationSubscriber" |
| | host\base\baseAddresses\ add | | name="TransferFlow" behaviorConfiguration="Work flowService" | name="TransferFlow" behaviorConfiguration="W orkflowService" |
| | endpoint | | baseAddress="http://<Server Address>211:16050/Transfer WF" | baseAddress="http://localh ost:16050/TransferWF" |
| | endpoint | | address="" bindingConfiguration="Servic eBinding" binding="wsFederationHttpBi nding" contract="BMS.Workflows.W F.ITransferFlow" | address="" bindingConfiguration="Serv iceBinding" binding="wsFederationHttp Binding" contract="BMS.Workflows. WF.ITransferFlow" |
| | endpoint | | address="win" bindingConfiguration="WinBi nding" binding="wsFederationHttpBi nding" contract="BMS.Workflows.W F.ITransferFlow" | address="win" bindingConfiguration="Win Binding" binding="wsFederationHttp Binding" contract="BMS.Workflows. WF.ITransferFlow" |
| | endpoint | | contract="IMetadataExchang e" binding="mexHttpBinding" address="mex" | contract="IMetadataExcha nge" binding="mexHttpBinding" address="mex" |

| Section | Configuration Key/Name | Configuration values (ex.) | | Descript ion |
|---------|---------------------------------|----------------------------|--|--|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.c onfig | BMS.ServiceHost.config |
| | service | | address="unsec" binding="basicHttpBinding" contract="BMS.Workflows.WF.ITransferFlow" | address="unsec" binding="basicHttpBinding" contract="BMS.Workflows.WF.ITransferFlow" |
| | host\base\baseAddresses\ add | | name="WaitingListFlow" behaviorConfiguration="WorkflowService" | name="WaitingListFlow" behaviorConfiguration="WorkflowService" |
| | endpoint | | baseAddress="http://<ServerAddress>211:16050/WaitingListWF" | baseAddress="http://localhost:16050/WaitingListWF" |
| | endpoint | | address="" bindingConfiguration="ServiceBinding" binding="wsFederationHttpBinding" contract="BMS.Workflows.WF.IWaitingListFlow" | address="" bindingConfiguration="ServiceBinding" binding="wsFederationHttpBinding" contract="BMS.Workflows.WF.IWaitingListFlow" |
| | endpoint | | address="win" bindingConfiguration="WinBinding" binding="wsFederationHttpBinding" contract="BMS.Workflows.WF.IWaitingListFlow" | address="win" bindingConfiguration="WinBinding" binding="wsFederationHttpBinding" contract="BMS.Workflows.WF.IWaitingListFlow" |
| | endpoint | | contract="IMetadataExchange" binding="mexHttpBinding" address="mex" | contract="IMetadataExchange" binding="mexHttpBinding" address="mex" |

| Section | Configuration Key/Name | Configuration values (ex.) | | Descript ion |
|---------|---------------------------------|----------------------------|---|---|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.c onfig | BMS.ServiceHost.config |
| | service | | address="unsec" binding="basicHttpBinding" contract="BMS.Workflows.WF.IWaitingListFlow" | address="unsec" binding="basicHttpBinding" contract="BMS.Workflows.WF.IWaitingListFlow" |
| | host\base\baseAddresses\ add | | name="BedUnavailableFlow" behaviorConfiguration="WorkflowService" | name="BedUnavailableFlow" behaviorConfiguration="WorkflowService" |
| | endpoint | | baseAddress="http://<ServerAddress>211:16050/BedUnavailableWF" | name="BedUnavailableFlow" behaviorConfiguration="WorkflowService" |
| | endpoint | | address="" bindingConfiguration="ServiceBinding" binding="wsFederationHttpBinding" contract="BMS.Workflows.WF.IBedUnavailableFlow" | address="" bindingConfiguration="ServiceBinding" binding="wsFederationHttpBinding" contract="BMS.Workflows.WF.IBedUnavailableFlow" |
| | endpoint | | address="win" bindingConfiguration="WinBinding" binding="wsFederationHttpBinding" contract="BMS.Workflows.WF.IBedUnavailableFlow" | address="win" bindingConfiguration="WinBinding" binding="wsFederationHttpBinding" contract="BMS.Workflows.WF.IBedUnavailableFlow" |
| | endpoint | | contract="IMetadataExchange" binding="mexHttpBinding" address="mex" | contract="IMetadataExchange" binding="mexHttpBinding" address="mex" |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|-----------------------------|----------------------------|---|---|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | service | | address="unsec" binding="basicHttpBinding" contract="BMS.Workflows.WF.IBedUnavailableFlow" | address="unsec" binding="basicHttpBinding" contract="BMS.Workflows.WF.IBedUnavailableFlow" |
| | host\base\baseAddresses\add | | name="BMS.ServiceImplementation.VistaQueryCore" behaviorConfiguration="ServiceBehavior" | name="BMS.ServiceImplementation.VistaQueryCore" behaviorConfiguration="ServiceBehavior" |
| | endpoint | | baseAddress="http://<ServerAddress>211:16050/VistaQuery" | baseAddress="http://localhost:16050/VistaQuery" |
| | endpoint | | address="" bindingConfiguration="ServiceBinding" binding="wsFederationHttpBinding" contract="BMS.ServiceContracts.IVistaWorkerQuery" | address="" bindingConfiguration="ServiceBinding" binding="wsFederationHttpBinding" contract="BMS.ServiceContracts.IVistaWorkerQuery" |
| | endpoint | | address="win" bindingConfiguration="WinBinding" binding="wsFederationHttpBinding" contract="BMS.ServiceContracts.IVistaWorkerQuery" | address="win" bindingConfiguration="WinBinding" binding="wsFederationHttpBinding" contract="BMS.ServiceContracts.IVistaWorkerQuery" |
| | endpoint | | contract="IMetadataExchange" binding="mexHttpBinding" address="mex" | contract="IMetadataExchange" binding="mexHttpBinding" address="mex" |

| Section | Configuration Key/Name | Configuration values (ex.) | | Descript ion |
|---------|---------------------------------|----------------------------|---|---|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.c onfig | BMS.ServiceHost.config |
| | service | | address="unsec" binding="basicHttpBinding" contract="BMS.ServiceContr acts.IVistaWorkerQuery" | address="unsec" binding="basicHttpBinding" contract="BMS.ServiceCon tracts.IVistaWorkerQuery" |
| | host\base\baseAddresses\ add | | name="BMS.VistaIntegration .HL7.ServiceImplementation. HL7OperationsCore" behaviorConfiguration="Basi cBindingBehavior" | name="BMS.VistaIntegrati on.HL7.ServiceImplementa tion.HL7OperationsCore" behaviorConfiguration="Ba sicBindingBehavior" |
| | endpoint | | baseAddress="http://<Server Address>211:16050/HL7Ope rations" | baseAddress="http://localh ost:16050/HL7Operations" |
| | bindings/basicHttpBinding | | address="" bindingConfiguration="messa gingBinding" binding="basicHttpBinding" contract="BMS.VistaIntegrati on.HL7.ServiceContracts.IHL 7Operations" | address="" bindingConfiguration="mes sagingBinding" binding="basicHttpBinding" contract="BMS.VistaIntegr ation.HL7.ServiceContract s.IHL7Operations" |
| | binding | | | |
| | binding | | name="EVSBinding" maxReceivedMessageSize=" 2147483647" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" | name="EVSBinding" maxReceivedMessageSize ="2147483647" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" |

| Section | Configuration Key/Name | Configuration values (ex.) | | Descript ion |
|---------|------------------------|----------------------------|---|---|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.c onfig | BMS.ServiceHost.config |
| | binding | | name="subscriptionBinding" maxBufferSize="2147483647" maxReceivedMessageSize="2147483647" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" | name="subscriptionBinding" maxBufferSize="2147483647" maxReceivedMessageSize="2147483647" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" |
| | readerQuotas | | name="messagingBinding" maxBufferSize="2147483647" maxReceivedMessageSize="2147483647" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" | name="messagingBinding" maxBufferSize="2147483647" maxReceivedMessageSize="2147483647" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" |
| | binding | | maxDepth="2147483647" maxStringContentLength="2147483647" maxArrayLength="2147483647" maxBytesPerRead="2147483647" maxNameTableCharCount="2147483647" | maxDepth="2147483647" maxStringContentLength="2147483647" maxArrayLength="2147483647" maxBytesPerRead="2147483647" maxNameTableCharCount="2147483647" |

| Section | Configuration Key/Name | Configuration values (ex.) | | Descript ion | |
|---------|------------------------|----------------------------|---|---|--|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.c onfig | BMS.ServiceHost.config | |
| | readerQuotas | | name="QuerySvcSoap" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" allowCookies="false" bypassProxyOnLocal="false" hostNameComparisonMode="StrongWildcard" maxBufferSize="2147483647" maxReceivedMessageSize="2147483647" messageEncoding="Text" textEncoding="utf-8" transferMode="Buffered" useDefaultWebProxy="true" | name="QuerySvcSoap" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" allowCookies="false" bypassProxyOnLocal="false" hostNameComparisonMode="StrongWildcard" maxBufferSize="2147483647" maxReceivedMessageSize="2147483647" messageEncoding="Text" textEncoding="utf-8" transferMode="Buffered" useDefaultWebProxy="true" | |
| | security mode="None" | | maxDepth="32" maxStringContentLength="2147483647" maxArrayLength="2147483647" maxBytesPerRead="2147483647" maxNameTableCharCount="2147483647" | maxDepth="32" maxStringContentLength="2147483647" maxArrayLength="2147483647" maxBytesPerRead="2147483647" maxNameTableCharCount="2147483647" | |
| | transport | | | | |
| | message | | clientCredentialType="None" proxyCredentialType="None" realm="" | clientCredentialType="None" proxyCredentialType="None" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|---------------------------|----------------------------|--|--|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | | | | realm="" |
| | binding | | clientCredentialType="UserName" algorithmSuite="Default" | clientCredentialType="UserName" algorithmSuite="Default" |
| | readerQuotas | | name="QuerySvcSoapHttps" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" allowCookies="false" bypassProxyOnLocal="false" hostNameComparisonMode="StrongWildcard" maxBufferSize="2147483647" maxReceivedMessageSize="2147483647" messageEncoding="Text" textEncoding="utf-8" transferMode="Buffered" useDefaultWebProxy="true" | name="QuerySvcSoapHttps" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" allowCookies="false" bypassProxyOnLocal="false" hostNameComparisonMode="StrongWildcard" maxBufferSize="2147483647" maxReceivedMessageSize="2147483647" messageEncoding="Text" textEncoding="utf-8" transferMode="Buffered" useDefaultWebProxy="true" |
| | security mode="Transport" | | maxDepth="32" maxStringContentLength="2147483647" maxArrayLength="2147483647" maxBytesPerRead="2147483647" maxNameTableCharCount="2147483647" | maxDepth="32" maxStringContentLength="2147483647" maxArrayLength="2147483647" maxBytesPerRead="2147483647" maxNameTableCharCount="2147483647" |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|-------------------------|---|---|---|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | transport | | | |
| | wsFederationHttpBinding | | clientCredentialType="None" proxyCredentialType="None" realm="" | clientCredentialType="None" proxyCredentialType="None" realm="" |
| | binding | | | |
| | readerQuotas | | name="WSFederationHttpBinding_AuthenticatedService" maxReceivedMessageSize="2147483647" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" | name="WSFederationHttpBinding_AuthenticatedService" maxReceivedMessageSize="2147483647" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" |
| | security mode="Message" | | maxDepth="32" maxStringContentLength="2147483647" maxArrayLength="2147483647" maxBytesPerRead="4096" maxNameTableCharCount="16384" | maxDepth="32" maxStringContentLength="2147483647" maxArrayLength="2147483647" maxBytesPerRead="4096" maxNameTableCharCount="16384" |
| | message | | | |
| | issuer | address="http://<ServerAddress>210:16050/STS/mex" | algorithmSuite="Default" issuedKeyType="SymmetricKey" issuedTokenType="http://docs.oasis-open.org/wss/oasis-wss-saml-token-profile-1.1#SAMLV2.0" negotiateServiceCredential="false" establishSecurityContext="true" | algorithmSuite="Default" issuedKeyType="SymmetricKey" issuedTokenType="http://docs.oasis-open.org/wss/oasis-wss-saml-token-profile-1.1#SAMLV2.0" negotiateServiceCredential="false" establishSecurityContext="true" |

| Section | Configuration Key/Name | Configuration values (ex.) | | Descript ion |
|---------|--|--|--|--|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.c onfig | BMS.ServiceHost.config |
| | identity\dns | | address="http://<ServerAddress>210:16050/STS/" binding="wsHttpBinding" bindingConfiguration="wsUs erName" | address="http://localhost:16050/STS/" binding="wsHttpBinding" bindingConfiguration="wsU serName" |
| | binding | name="ServiceBinding" maxBufferPoolSize="2147483647" maxReceivedMessageSize="2147483647" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" | value="IWHM3STS" | value="IWHM3STS" |
| | readerQuotas | maxDepth="32" maxStringContentLength="2147483647" maxArrayLength="2147483647" maxBytesPerRead="4096" maxNameTableCharCount="16384" | name="ServiceBinding" maxBufferPoolSize="2147483647" maxReceivedMessageSize="2147483647" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" | name="ServiceBinding" maxBufferPoolSize="2147483647" maxReceivedMessageSize="2147483647" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" |
| | security mode="Message" | | maxDepth="32" maxStringContentLength="2147483647" maxArrayLength="2147483647" maxBytesPerRead="4096" maxNameTableCharCount="16384" | maxDepth="32" maxStringContentLength="2147483647" maxArrayLength="2147483647" maxBytesPerRead="4096" maxNameTableCharCount="16384" |
| | message issuedTokenType="http://docs.oasis-open.org/wss/oasis-wss-saml-token-profile-1.1#SAMLV2.0" negotiateServiceCredential="false" | issuerMetadata address="http://<ServerAddress>210:16050/STS/mex" | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Descript ion |
|---------|---------------------------------|--|--|--|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.c onfig | BMS.ServiceHost.config |
| | establishSecurityContext="true" | | | |
| | binding | name="WinBinding" maxBufferPoolSize="2147483647" maxReceivedMessageSize="2147483647" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" | issuerMetadata address="http://<ServerAddress>210:16050/STS/mex" | issuerMetadata address="http://localhost:16050/STS/mex" |
| | readerQuotas | maxDepth="32" maxStringContentLength="2147483647" maxArrayLength="2147483647" maxBytesPerRead="4096" maxNameTableCharCount="16384" | name="WinBinding" maxBufferPoolSize="2147483647" maxReceivedMessageSize="2147483647" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" | name="WinBinding" maxBufferPoolSize="2147483647" maxReceivedMessageSize="2147483647" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" |
| | security mode="Message" | | maxDepth="32" maxStringContentLength="2147483647" maxArrayLength="2147483647" maxBytesPerRead="4096" maxNameTableCharCount="16384" | maxDepth="32" maxStringContentLength="2147483647" maxArrayLength="2147483647" maxBytesPerRead="4096" maxNameTableCharCount="16384" |
| | message | issuedTokenType="http://docs.oasis-open.org/wss/oasis-wss-saml-token-profile-1.1#SAMLV2.0" negotiateServiceCredential="false" establishSecurityContext="true" | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | | Description |
|---------|-------------------------------|---|---|---|-------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | issuer | address="http://<ServerAddress>210:16050/STS/Windows" binding="wsHttpBinding" bindingConfiguration="StsWinBinding" | issuedTokenType="http://docs.oasis-open.org/wss/oasis-wss-saml-token-profile-1.1#SAMLV2.0" negotiateServiceCredential="false" establishSecurityContext="true" | issuedTokenType="http://docs.oasis-open.org/wss/oasis-wss-saml-token-profile-1.1#SAMLV2.0" negotiateServiceCredential="false" establishSecurityContext="true" | |
| | identity\servicePrincipalName | value="host/localhost" | address="http://<ServerAddress>210:16050/STS/Windows" binding="wsHttpBinding" bindingConfiguration="StsWinBinding" | address="http://localhost:16050/STS/Windows" binding="wsHttpBinding" bindingConfiguration="StsWinBinding" | |
| | binding | name="WinBindingHttps" maxBufferSize="2147483647" maxReceivedMessageSize="2147483647" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" | value="host/localhost" | value="host/localhost" | |
| | readerQuotas | maxDepth="32" maxStringContentLength="2147483647" maxArrayLength="2147483647" maxBytesPerRead="4096" maxNameTableCharCount="16384" | name="WinBindingHttps" maxBufferSize="2147483647" maxReceivedMessageSize="2147483647" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" | name="WinBindingHttps" maxBufferSize="2147483647" maxReceivedMessageSize="2147483647" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Descript ion |
|---------|--|--|---|---|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.c onfig | BMS.ServiceHost.config |
| | security mode="TransportWithMessageCredential" | | maxDepth="32" maxStringContentLength="2147483647" maxArrayLength="2147483647" maxBytesPerRead="4096" maxNameTableCharCount="16384" | maxDepth="32" maxStringContentLength="2147483647" maxArrayLength="2147483647" maxBytesPerRead="4096" maxNameTableCharCount="16384" |
| | message | issuedTokenType="http://docs.oasis-open.org/wss/oasis-wss-saml-token-profile-1.1#SAMLV2.0" negotiateServiceCredential="false" establishSecurityContext="true" | | |
| | issuer | address="http://<ServerAddress>210:16050/STS/Windows" binding="wsHttpBinding" bindingConfiguration="StsWinBinding" | issuedTokenType="http://docs.oasis-open.org/wss/oasis-wss-saml-token-profile-1.1#SAMLV2.0" negotiateServiceCredential="false" establishSecurityContext="true" | issuedTokenType="http://docs.oasis-open.org/wss/oasis-wss-saml-token-profile-1.1#SAMLV2.0" negotiateServiceCredential="false" establishSecurityContext="true" |
| | identity\servicePrincipalName | value="host/localhost" | address="http://<ServerAddress>210:16050/STS/Windows" binding="wsHttpBinding" bindingConfiguration="StsWinBinding" | address="http://localhost:16050/STS/Windows" binding="wsHttpBinding" bindingConfiguration="StsWinBinding" |
| | wsHttpBinding | | value="host/localhost" | value="host/localhost" |
| | binding | name="wsUserName" maxReceivedMessageSize="2147483647" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | | Description |
|---------|-------------------------|--|--|--|-------------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | security mode="Message" | | | | |
| | message | clientCredentialType="UserName" negotiateServiceCredential="false" algorithmSuite="Default" establishSecurityContext="true" | | | |
| | binding | name="StsWinBinding" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" | | | |
| | security mode="Message" | | | | Kerberos/ NTLM |
| | message | clientCredentialType="UserName" negotiateServiceCredential="false" algorithmSuite="Default" establishSecurityContext="true" | | | |
| | binding | name="StsWinBinding" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" | clientCredentialType="UserName" negotiateServiceCredential="false" algorithmSuite="Default" establishSecurityContext="true" | clientCredentialType="UserName" negotiateServiceCredential="false" algorithmSuite="Default" establishSecurityContext="true" | |
| | security mode="Message" | name="StsWinBinding" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" | name="StsWinBinding" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" | name="StsWinBinding" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" | |
| | message | clientCredentialType="Windows" negotiateServiceCredential="true" establishSecurityContext="true" | | | |
| | binding | name="wsBindConf" maxReceivedMessageSize="2147483647" closeTimeout="00:10:00" openTimeout="00:10:00" receiveTimeout="00:15:00" sendTimeout="00:10:00" | | | |
| | client | | | | |
| | endpoint | | | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description | |
|---------|------------------------|----------------------------|---|--|--------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | endpoint | | <p>address="http://vaausbmsweb26:87/QuerySvc.asmx" binding="basicHttpBinding"</p> <p>bindingConfiguration="QuerySvcSoap" contract="QuerySvcService.QuerySvcSoap" name="QuerySvcSoap"</p> | <p>address="http://vaausbmsweb76/mdws2/QuerySvc.asmx" binding="basicHttpBinding"</p> <p>bindingConfiguration="QuerySvcSoap" contract="QuerySvcService.QuerySvcSoap" name="QuerySvcSoap"</p> | MD WS2 |
| | endpoint | | <p>address="https://vaausnumweb22.aac.dva.va.gov/Inpatient.asmx" binding="basicHttpBinding"</p> <p>bindingConfiguration="QuerySvcSoapHttps" contract="BMS.ServicesWrapper.Proxy.InpatientSoap" name="InpatientSoap"</p> | <p>address="https://hceveah03:100/Inpatient.asmx" binding="basicHttpBinding"</p> <p>bindingConfiguration="QuerySvcSoapHttps" contract="BMS.ServicesWrapper.Proxy.InpatientSoap" name="InpatientSoap"</p> | NUM I |

| Section | Configuration Key/Name | Configuration values (ex.) | | Descript ion | |
|---------|------------------------|----------------------------|--|---|-----|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.c onfig | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAd dress>210:16050/PAP" behaviorConfiguration="Cli entCredentialsBehavior" binding="wsFederationHttp Binding" bindingConfiguration="WS FederationHttpBinding_Aut henticatedService" contract="InfoWorld.Securit y.Authorization.PolicyAdmi nistrationPoint.IAdministrati veFunctions" name="PAP.Administrative Functions" | address="http://localhost:1 6050/PAP" behaviorConfiguration="Cli entCredentialsBehavior" binding="wsFederationHttp Binding" bindingConfiguration="WS FederationHttpBinding_Aut henticatedService" contract="InfoWorld.Securit y.Authorization.PolicyAdmi nistrationPoint.IAdministrati veFunctions" name="PAP.Administrative Functions" | PAP |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description | |
|---------|------------------------|----------------------------|--|---|-----|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | identity\dns | | endpoint address="http://<ServerAddress>210:16050/PDP" behaviorConfiguration="ClientCredentialsBehavior" binding="wsFederationHttpBinding" bindingConfiguration="WSFederationHttpBinding_AuthenticatedService" contract="InfoWorld.Security.PolicyDecisionPoint.IAuthorizationService" name="PDP.AuthorizationService" | address="http://localhost:16050/PDP" behaviorConfiguration="ClientCredentialsBehavior" binding="wsFederationHttpBinding" bindingConfiguration="WSFederationHttpBinding_AuthenticatedService" contract="InfoWorld.Security.PolicyDecisionPoint.IAuthorizationService" name="PDP.AuthorizationService" | PDP |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Descript ion | |
|---------|------------------------|----------------------------|--|---|-----------------------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.c onfig | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAddress>210:16050/PAP" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttp Binding" bindingConfiguration="Win Binding" contract="InfoWorld.Security.Authorization.PolicyAdministrationPoint.IAdministrativeFunctions" name="PAP.Administrative Functions.Windows" | address="http://localhost:16050/PAP" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttp Binding" bindingConfiguration="Win Binding" contract="InfoWorld.Security.Authorization.PolicyAdministrationPoint.IAdministrativeFunctions" name="PAP.Administrative Functions.Windows" | PAP: Windows authentication |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description | |
|---------|------------------------|----------------------------|---|--|-----------------------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAddress>210:16050/PDP" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" contract="InfoWorld.Security.PolicyDecisionPoint.IAuthorizationService" name="PDP.AuthorizationService.Windows" | address="http://localhost:16050/PDP" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" contract="InfoWorld.Security.PolicyDecisionPoint.IAuthorizationService" name="PDP.AuthorizationService.Windows" | PDP: Windows authentication |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Descript ion | |
|---------|------------------------|----------------------------|--|---|---------------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.c onfig | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAddress>211:16050/QueryFunctions" behaviorConfiguration="ClientCredentialsBehavior" binding="wsFederationHttpBinding" bindingConfiguration="WSFederationHttpBinding_AuthenticatedService" name="EIS.QueryFunctions" contract="InfoWorld.EIS.IQueryFunctions" | address="http://localhost:16050/QueryFunctions" behaviorConfiguration="ClientCredentialsBehavior" binding="wsFederationHttpBinding" bindingConfiguration="WSFederationHttpBinding_AuthenticatedService" name="EIS.QueryFunctions" contract="InfoWorld.EIS.IQueryFunctions" | EIS: QueryFunctions |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description | |
|---------|------------------------|----------------------------|---|--|-----------------------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAddress>211:16050/QueryFunctions" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" contract="InfoWorld.EIS.IQueryFunctions" name="EIS.QueryFunctions.Windows" | address="http://localhost:16050/QueryFunctions" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" contract="InfoWorld.EIS.IQueryFunctions" name="EIS.QueryFunctions.Windows" | EIS: Windows authentication |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description | |
|---------|------------------------|----------------------------|---|--|-----------------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAddress>211:16050/EntityManagement" behaviorConfiguration="ClientCredentialsBehavior" binding="wsFederationHttpBinding" name="EIS.EntityManagement" bindingConfiguration="WSFederationHttpBinding_AuthenticatedService" contract="InfoWorld.EIS.IEEntityManagement" | address="http://localhost:16050/EntityManagement" behaviorConfiguration="ClientCredentialsBehavior" binding="wsFederationHttpBinding" name="EIS.EntityManagement" bindingConfiguration="WSFederationHttpBinding_AuthenticatedService" contract="InfoWorld.EIS.IEEntityManagement" | EIS: EntityManagement |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Descript ion | |
|---------|------------------------|----------------------------|---|--|-----------------------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.c onfig | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAddress>211:16050/EntityManagement" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" name="EIS.EntityManagement.Windows" bindingConfiguration="WinBinding" contract="InfoWorld.EIS.IE nti tyManagement" | address="http://localhost:16050/EntityManagement" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" name="EIS.EntityManagement.Windows" bindingConfiguration="WinBinding" contract="InfoWorld.EIS.IE nti tyManagement" | EIS: Windows authentication |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |
| | endpoint | | address="http://<ServerAddress>211:16050/CTSVocabularyRuntime" name="EVS.CTSVocabularyRuntime" binding="basicHttpBinding" bindingConfiguration="EVSBinding" contract="InfoWorld.EVS.C TSVAPI.RuntimeOperations" behaviorConfiguration="DataContractSerializer" | address="http://localhost:16050/CTSVocabularyRuntime" name="EVS.CTSVocabularyRuntime" binding="basicHttpBinding" bindingConfiguration="EVSBinding" contract="InfoWorld.EVS.C TSVAPI.RuntimeOperations" behaviorConfiguration="DataContractSerializer" | EVS |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|------------------------|----------------------------|---|--|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | endpoint | | <p>address="http://<ServerAddress>211:16050/CTSVocabularyBrowse"</p> <p>name="EVS.CTSVocabularyBrowse"</p> <p>binding="basicHttpBinding"</p> <p>bindingConfiguration="EVSBinding"</p> <p>contract="InfoWorld.EVS.CTSVAPI.BrowserOperations"</p> <p>behaviorConfiguration="DataContractSerializer"</p> | <p>address="http://localhost:16050/CTSVocabularyBrowse"</p> <p>name="EVS.CTSVocabularyBrowse"</p> <p>binding="basicHttpBinding"</p> <p>bindingConfiguration="EVSBinding"</p> <p>contract="InfoWorld.EVS.CTSVAPI.BrowserOperations"</p> <p>behaviorConfiguration="DataContractSerializer"</p> |
| | endpoint | | <p>address="http://<ServerAddress>211:16050/CTSMessagesBrowse"</p> <p>name="EVS.CTSMessagesBrowse"</p> <p>binding="basicHttpBinding"</p> <p>bindingConfiguration="EVSBinding"</p> <p>contract="InfoWorld.EVS.CTSMAPI.BrowserOperations"</p> <p>behaviorConfiguration="DataContractSerializer"</p> | <p>address="http://localhost:16050/CTSMessagesBrowse"</p> <p>name="EVS.CTSMessagesBrowse"</p> <p>binding="basicHttpBinding"</p> <p>bindingConfiguration="EVSBinding"</p> <p>contract="InfoWorld.EVS.CTSMAPI.BrowserOperations"</p> <p>behaviorConfiguration="DataContractSerializer"</p> |
| | endpoint | | <p>address="http://<ServerAddress>211:16050/CTSMessagesRuntime"</p> <p>name="EVS.CTSMessagesRuntime"</p> <p>binding="basicHttpBinding"</p> <p>bindingConfiguration="EVSBinding"</p> <p>contract="InfoWorld.EVS.CTSMAPI.RuntimeOperations"</p> <p>behaviorConfiguration="DataContractSerializer"</p> | <p>address="http://localhost:16050/CTSMessagesRuntime"</p> <p>name="EVS.CTSMessagesRuntime"</p> <p>binding="basicHttpBinding"</p> <p>bindingConfiguration="EVSBinding"</p> <p>contract="InfoWorld.EVS.CTSMAPI.RuntimeOperations"</p> <p>behaviorConfiguration="DataContractSerializer"</p> |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|------------------------|----------------------------|---|--|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | endpoint | | address="http://<ServerAddress>211:16050/CTSMes sageEdit" name="EVS.CTSMes sageEdit" binding="basicHttpBinding" bindingConfiguration="EVS Binding" contract="InfoWorld.EVS.C TSEdit.IMessageEdit" behaviorConfiguration="Da taContractSerializer" | address="http://localhost:1 6050/CTSMes sageEdit" name="EVS.CTSMes sageEdit" binding="basicHttpBinding" bindingConfiguration="EVS Binding" contract="InfoWorld.EVS.C TSEdit.IMessageEdit" behaviorConfiguration="Da taContractSerializer" |
| | endpoint | | address="http://<ServerAd dress>211:16050/CTSVoc abularyEdit" name="EVS.CTSVocabu laryEdit" binding="basicHttpBinding" bindingConfiguration="EVS Binding" contract="ICTSEditVocabul ary" | address="http://localhost:1 6050/CTSVocabu laryEdit" name="EVS.CTSVocabu laryEdit" binding="basicHttpBinding" bindingConfiguration="EVS Binding" contract="ICTSEditVocabul ary" |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description | |
|---------|------------------------|----------------------------|--|---|-----------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAddress>211:16050/BMSQuery" behaviorConfiguration="ClientCredentialsBehavior" binding="wsFederationHttpBinding" bindingConfiguration="WSFederationHttpBinding_AuthenticatedService" name="BMS.BMSQuery" contract="BMS.ServiceContracts.IBedManagerQuery" | address="http://localhost:16050/BMSQuery" behaviorConfiguration="ClientCredentialsBehavior" binding="wsFederationHttpBinding" bindingConfiguration="WSFederationHttpBinding_AuthenticatedService" name="BMS.BMSQuery" contract="BMS.ServiceContracts.IBedManagerQuery" | BMS Query |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description | |
|---------|------------------------|----------------------------|---|--|--------------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAddress>211:16050/BMSQuery" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" name="BMS.BMSQuery.Windows" contract="BMS.ServiceContracts.IBedManagerQuery" | address="http://localhost:16050/BMSQuery" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" name="BMS.BMSQuery.Windows" contract="BMS.ServiceContracts.IBedManagerQuery" | BMS Query: Windows |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Descript ion | |
|---------|------------------------|----------------------------|---|--|---------------------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.c onfig | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAd dress>211:16050/BMSOpe rations" behaviorConfiguration="Cli entCredentialsBehavior" binding="wsFederationHttp Binding" bindingConfiguration="WS FederationHttpBinding_Aut henticatedService" name="BMS.BMSOperatio ns" contract="BMS.ServiceCon tracts.IBedManagerOperati ons" | address="http://localhost:1 6050/BMSOperations" behaviorConfiguration="Cli entCredentialsBehavior" binding="wsFederationHttp Binding" bindingConfiguration="WS FederationHttpBinding_Aut henticatedService" name="BMS.BMSOperatio ns" contract="BMS.ServiceCon tracts.IBedManagerOperati ons" | BMS Oper ation s |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description | |
|---------|------------------------|----------------------------|--|---|-------------------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAddress>211:16050/BMSOperations" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" name="BMS.BMSOperations.Windows" contract="BMS.ServiceContracts.IBedManagerOperations" | address="http://localhost:16050/BMSOperations" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" name="BMS.BMSOperations.Windows" contract="BMS.ServiceContracts.IBedManagerOperations" | BMS Operations: Windows |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Descript ion | |
|---------|------------------------|----------------------------|--|---|------------------------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.c onfig | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAd dress>210:16050/BMSCon figurationOperations" behaviorConfiguration="Cli entCredentialsBehavior" binding="wsFederationHttp Binding" bindingConfiguration="WS FederationHttpBinding_Aut henticatedService" name ="BMS.BMSConfiguration Operations" contract="BMS.ServiceCon tracts.IConfigurationOperat ions" | address="http://localhost:1 6050/BMSConfigurationOp erations" behaviorConfiguration="Cli entCredentialsBehavior" binding="wsFederationHttp Binding" bindingConfiguration="WS FederationHttpBinding_Aut henticatedService" name ="BMS.BMSConfiguration Operations" contract="BMS.ServiceCon tracts.IConfigurationOperat ions" | BMS Confi gurat ion |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description | |
|---------|------------------------|----------------------------|---|--|----------------------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAddress>210:16050/BMSConfigurationOperations" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" name ="BMS.BMSConfigurationOperations.Windows" contract="BMS.ServiceContracts.IConfigurationOperations" | address="http://localhost:16050/BMSConfigurationOperations" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" name ="BMS.BMSConfigurationOperations.Windows" contract="BMS.ServiceContracts.IConfigurationOperations" | BMS Configuration: Windows |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description | |
|---------|------------------------|----------------------------|--|---|--------------------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAddress>211:16050/BedUnavailableWF" behaviorConfiguration="ClientCredentialsBehavior" binding="wsFederationHttpBinding" bindingConfiguration="WSFederationHttpBinding_AuthenticatedService" name="BMSWF.IBedUnavailableFlow" contract="BMS.Workflows.WF.IBedUnavailableFlow" | address="http://localhost:16050/BedUnavailableWF" behaviorConfiguration="ClientCredentialsBehavior" binding="wsFederationHttpBinding" bindingConfiguration="WSFederationHttpBinding_AuthenticatedService" name="BMSWF.IBedUnavailableFlow" contract="BMS.Workflows.WF.IBedUnavailableFlow" | Bed Unavailable Workflow |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description | |
|---------|------------------------|----------------------------|---|--|-----------------------------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAddress>211:16050/BedUnavailableWF" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" name="BMSWF.IBedUnavailableFlow.Windows" contract="BMS.Workflows.WF.IBedUnavailableFlow" | address="http://localhost:16050/BedUnavailableWF" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" name="BMSWF.IBedUnavailableFlow.Windows" contract="BMS.Workflows.WF.IBedUnavailableFlow" | Bed Unavailable Workflow: Windows |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Descript ion | |
|---------|------------------------|----------------------------|---|--|-----------------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.c onfig | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAddress>211:16050/WaitingListWF" behaviorConfiguration="ClientCredentialsBehavior" binding="wsFederationHttpBinding" bindingConfiguration="WSFederationHttpBinding_AuthenticatedService" name="BMSWF.IWaitingListFlow" contract="BMS.Workflows.WF.IWaitingListFlow" | address="http://localhost:16050/WaitingListWF" behaviorConfiguration="ClientCredentialsBehavior" binding="wsFederationHttpBinding" bindingConfiguration="WSFederationHttpBinding_AuthenticatedService" name="BMSWF.IWaitingListFlow" contract="BMS.Workflows.WF.IWaitingListFlow" | Waiting List Workflow |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Descript ion | |
|---------|------------------------|----------------------------|--|--|-------------------------------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.c onfig | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAd dress>211:16050/WaitingLi stWF" behaviorConfiguration="Wi ndowsClientCredentials" binding="wsFederationHttp Binding" bindingConfiguration="Win Binding" name="BMSWF.IWaitingLi stFlow.Windows" contract="BMS.Workflows. WF.IWaitingListFlow" | address="http://localhost:1 6050/WaitingListWF" behaviorConfiguration="Cli entCredentialsBehavior" binding="wsFederationHttp Binding" bindingConfiguration="WS FederationHttpBinding_Aut henticatedService" name="BMSWF.IWaitingLi stFlow" contract="BMS.Workflows. WF.IWaitingListFlow" | Waiti ng List Work flow |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description | |
|---------|------------------------|----------------------------|--|---|--------------------------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAddress>211:16050/VistaQuery" behaviorConfiguration="ClientCredentialsBehavior" binding="wsFederationHttpBinding" bindingConfiguration="WSFederationHttpBinding_AuthenticatedService" contract="BMS.ServiceContracts.IVistaWorkerQuery" name="BMS.VistaQuery" | address="http://localhost:16050/WaitingListWF" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" name="BMSWF.IWaitingListFlow.Windows" contract="BMS.Workflows.WF.IWaitingListFlow" | Waiting List Workflow: Windows |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description | |
|---------|------------------------|----------------------------|---|--|---|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAddress>211:16050/VistaQuery" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" contract="BMS.ServiceContracts.IVistaWorkerQuery" name="BMS.VistaQuery.Windows" | address="http://localhost:16050/VistaQuery" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" contract="BMS.ServiceContracts.IVistaWorkerQuery" name="BMS.VistaQuery.Windows" | BMS Vista Query - Configuration Windows |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description | |
|---------|------------------------|----------------------------|--|---|---------------------------------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | identity\dns | | address="http://vawww.bms.va.gov:80/CacheService.svc" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" name="BMS.Cache.Windows" contract="BMS.ServiceContracts.ICacheService" | address="http://vausbmsweb75.aac.dva.va.gov:80/CacheService.svc" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" name="BMS.Cache.Windows" contract="BMS.ServiceContracts.ICacheService" | BMS Web Cache - Client: Windows |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description | |
|---------|------------------------|----------------------------|--|--|---|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | identity\dns | | address="https://REDACTED .va.gov:443/CacheService. svc" behaviorConfiguration="Wi ndowsClientCredentials" binding="wsFederationHttp Binding" bindingConfiguration="Win BindingHttps" name="BMS.Cache.Windo ws.Https" contract="BMS.ServiceCon tracts.ICacheService" | address="https://vausbms web75.aac.dva.va.gov:443 /CacheService.svc" behaviorConfiguration="Wi ndowsClientCredentials" binding="wsFederationHttp Binding" bindingConfiguration="Win BindingHttps" name="BMS.Cache.Windo ws.Https" contract="BMS.ServiceCon tracts.ICacheService" | BMS Web Cach e - Clie nt: Wind ows |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description | |
|---------|------------------------|----------------------------|--|---|----------|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | identity\dns | | address="http://<ServerAddress>211:16050/BMSCache" behaviorConfiguration="ClientCredentialsBehavior" binding="wsFederationHttpBinding" bindingConfiguration="WSFederationHttpBinding_AuthenticatedService" name="BMS.BMSCache" contract="BMS.ServiceContracts.IBedManagerCache" | address="http://localhost:16050/BMSCache" behaviorConfiguration="ClientCredentialsBehavior" binding="wsFederationHttpBinding" bindingConfiguration="WSFederationHttpBinding_AuthenticatedService" name="BMS.BMSCache" contract="BMS.ServiceContracts.IBedManagerCache" | BMSCache |
| | endpoint | | value="IWHM3Services" | value="IWHM3Services" | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|---|--|---|--|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | identity\dns | | address="http://<ServerAddress>211:16050/BMSCache" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" contract="BMS.ServiceContracts.IBedManagerCache" name="BMS.BMSCache.Windows" | address="http://localhost:16050/BMSCache" behaviorConfiguration="WindowsClientCredentials" binding="wsFederationHttpBinding" bindingConfiguration="WinBinding" contract="BMS.ServiceContracts.IBedManagerCache" name="BMS.BMSCache.Windows" |
| | behaviors | | value="IWHM3Services" | value="IWHM3Services" |
| | serviceBehaviors | | | |
| | behavior | name="ServiceBehavior" | | |
| | serviceMetadata | httpGetEnabled="true" | | |
| | serviceDebug | includeExceptionDetailInFaults="true" | | |
| | dataContractSerializer | type="InfoWorld.Security.Saml20.Saml20ServiceCredentials, Saml20" | | |
| | serviceCredentials | type="InfoWorld.Security.Saml20.Saml20ServiceCredentials, Saml20" | | |
| | serviceCertificate | findValue="IWHM3Services" storeLocation="LocalMachine" storeName="My" x509FindType="FindBySubjectName" | | |
| | issuedTokenAuthentication\knownCertificates\add | findValue="IWHM3STS" storeLocation="LocalMachine" storeName="My" x509FindType="FindBySubjectName" | | |
| | behavior name="WorkflowService" | | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|---|----------------------------|--|--|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | serviceMetadata httpGetEnabled="true" | | | |
| | serviceThrottling | | | |
| | serviceDebug | | maxConcurrentCalls="1500" maxConcurrentSessions="1500" | maxConcurrentCalls="1000" maxConcurrentSessions="1000" |
| | serviceCredentials | | includeExceptionDetailInFaults="true" | includeExceptionDetailInFaults="true" |
| | serviceCertificate | | type="InfoWorld.Security.Saml20.Saml20ServiceCredentials, Saml20" | type="InfoWorld.Security.Saml20.Saml20ServiceCredentials, Saml20" |
| | issuedTokenAuthentication \knownCertificates\add | | findValue="IWHM3Services" storeLocation="LocalMachine" storeName="My" x509FindType="FindBySubjectName" | findValue="IWHM3Services" storeLocation="LocalMachine" storeName="My" x509FindType="FindBySubjectName" |
| | sqlWorkflowInstanceStore | | findValue="IWHM3STS" storeLocation="LocalMachine" storeName="My" x509FindType="FindBySubjectName" | findValue="IWHM3STS" storeLocation="LocalMachine" storeName="My" x509FindType="FindBySubjectName" |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description | |
|---------|-----------------------------------|----------------------------|---|--|--|
| | | Split Service | | Combine Service | |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config | |
| | workflowIdle | | <pre>connectionString="Data Source=<DatabaseAddress>;Network Library=DBMSSOCN;Initial Catalog=BMS_InstanceStore;Integrated Security=True;Asynchronous Processing=True;Pooling=true;Min Pool Size=0;Max Pool Size=250;" instanceEncodingOption="None" instanceCompletionAction="DeleteAll" instanceLockedExceptionAction="BasicRetry" hostLockRenewalPeriod="00:00:30" runnableInstancesDetectionPeriod="00:00:02"</pre> | <pre>connectionString="Data Source=<DatabaseAddress>;Initial Catalog=BMS_InstanceStore;Integrated Security=True;Asynchronous Processing=True;Pooling=true;Min Pool Size=0;Max Pool Size=100;" instanceEncodingOption="None" instanceCompletionAction="DeleteAll" instanceLockedExceptionAction="BasicRetry" hostLockRenewalPeriod="00:00:30" runnableInstancesDetectionPeriod="00:00:02"</pre> | |
| | sqlWorkflowInstanceStorePromotion | | <pre>timeToUnload="00:00:00" timeToPersist="00:00:00"</pre> | timeToUnload="0" | |
| | promotionSets | | <pre>connectionString="Data Source=<DatabaseAddress>;Network Library=DBMSSOCN;Initial Catalog=BMS_InstanceStore;Integrated Security=True;Pooling=true;Min Pool Size=0;Max Pool Size=250;"</pre> | <pre>connectionString="Data Source=<DatabaseAddress>;Initial Catalog=BMS_InstanceStore;Integrated Security=True;Pooling=true;Min Pool Size=0;Max Pool Size=100;"</pre> | |
| | promotionSetName="AdmissionData" | | | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|--|----------------------------|---|---|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | promotionSet name="TransferData" | | <pre> <promotedValue propertyName="AdmissionId"/> <promotedValue propertyName="PatientName"/> <promotedValue propertyName="LocationName"/> </pre> | <pre> <promotedValue propertyName="AdmissionId"/> <promotedValue propertyName="PatientName"/> <promotedValue propertyName="LocationName"/> </pre> |
| | behavior name="BasicBindingBehavior" | | promotedValue propertyName="PatientSSN" | promotedValue propertyName="PatientSSN" |
| | endpointBehaviors | | <pre> <dataContractSerializer maxItemsInObjectGraph=" 2147483647"/> <serviceDebug includeExceptionDetailInFaults="true"/> <serviceMetadata HttpGetEnabled="true"/> </pre> | <pre> <dataContractSerializer maxItemsInObjectGraph=" 2147483647"/> <serviceDebug includeExceptionDetailInFaults="true"/> <serviceMetadata HttpGetEnabled="true"/> </pre> |
| | behavior | | | |
| | dataContractSerializer | | name="ClientCredentialsBehavior" | name="ClientCredentialsBehavior" |
| | durableIssuedTokenClient Credentials\serviceCertificate | | maxItemsInObjectGraph="2147483647" | maxItemsInObjectGraph="2147483647" |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|------------------------|----------------------------|--|---|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | authentication | | x509FindType="FindBySubjectName" findValue="IWHM3Services" storeName="My" storeLocation="LocalMachine" | x509FindType="FindBySubjectName" findValue="IWHM3Services" storeName="My" storeLocation="LocalMachine" |
| | scopedCertificates\add | | revocationMode="NoCheck" | revocationMode="NoCheck" |
| | durableIssuedToken | | targetUri="http://<ServerAddress>210:16050/STS/" x509FindType="FindBySubjectName" findValue="IWHM3STS" storeName="My" storeLocation="LocalMachine" | targetUri="http://localhost:16050/STS/" x509FindType="FindBySubjectName" findValue="IWHM3STS" storeName="My" storeLocation="LocalMachine" |
| | behavior | | connectionString="Data Source=<DatabaseAddress>;Network Library=DBMSSOCN;Initial Catalog=BMS;Integrated Security=True;Pooling=true;Min Pool Size=0;Max Pool Size=250;" identifier="SessionID" isolationLevel="ReadCommitted" | connectionString="Data Source=<DatabaseAddress>;Initial Catalog=BMS;Integrated Security=True;Pooling=true;Min Pool Size=0;Max Pool Size=100;" identifier="SessionID" isolationLevel="ReadCommitted" |
| | dataContractSerializer | | name="WindowsClientCredentials" | name="WindowsClientCredentials" |
| | clientCredentials | | maxItemsInObjectGraph="2147483647" | maxItemsInObjectGraph="2147483647" |
| | windows | | type="InfoWorld.Security.Authentication.CacheClientCredentials, SecurityTokenCache" | type="InfoWorld.Security.Authentication.CacheClientCredentials, SecurityTokenCache" |
| | serviceCertificate | | allowNtlm="true" | allowNtlm="true" |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|-------------------------------|----------------------------|---|--|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | defaultCertificate | | | |
| | authentication | | x509FindType="FindBySubjectName" findValue="IWHM3Services" storeName="My" storeLocation="LocalMachine" | x509FindType="FindBySubjectName" findValue="IWHM3Services" storeName="My" storeLocation="LocalMachine" |
| | scopedCertificates\add | | revocationMode="NoCheck" | revocationMode="NoCheck" |
| | behavior | | targetUri="http://<ServerAddress>210:16050/STS/Windows" x509FindType="FindBySubjectName" findValue="IWHM3STS" storeName="My" storeLocation="LocalMachine" | targetUri="http://localhost:16050/STS/Windows" x509FindType="FindBySubjectName" findValue="IWHM3STS" storeName="My" storeLocation="LocalMachine" |
| | dataContractSerializer | | name="DataContractSerializer" | name="DataContractSerializer" |
| | extensions\behaviorExtensions | | maxItemsInObjectGraph="2147483647" | maxItemsInObjectGraph="2147483647" |
| | add | | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|------------------------|----------------------------|---|---|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | add | | name="sqlWorkflowInstanceStorePromotion" type="BMS.Workflows.PropertyPromotionActivity.Configuration.SqlWorkflowInstanceStorePromotionElement, BMS.Workflows.PropertyPromotionActivity" | name="sqlWorkflowInstanceStorePromotion" type="BMS.Workflows.PropertyPromotionActivity.Configuration.SqlWorkflowInstanceStorePromotionElement, BMS.Workflows.PropertyPromotionActivity" |
| | add | | name="errorHandler" type="BMS.Workflows.CustomActivities.Utils.WFErrorHandlerElement, BMS.Workflows.CustomActivities" | name="errorHandler" type="BMS.Workflows.CustomActivities.Utils.WFErrorHandlerElement, BMS.Workflows.CustomActivities" |
| | log4net | | name="durableIssuedTokenClientCredentials" type="BMS.Security.Configuration.DurableIssuedTokenClientCredentialsConfigHandler, BMS.Security" | name="durableIssuedTokenClientCredentials" type="BMS.Security.Configuration.DurableIssuedTokenClientCredentialsConfigHandler, BMS.Security" |
| | root | value="OFF" | | set the level value to ALL or DEBUG in order to trace meth |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|------------------------|---|--|--|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | | | | od entry and exit times |
| | level value | "SQLAppender" | | |
| | appender-ref ref | name="FileAppender" type="log4net.Appender.FileAppender" | | |
| | appender | name="FileAppender" type="log4net.Appender.FileAppender" | | |
| | file | value="log-file.txt" | | |
| | appendToFile | value="true" | | |
| | layout | type="log4net.Layout.PatternLayout" | | |
| | conversionPattern | value="%date [%6thread] -> %message% <-%newline" | | |
| | appender | name="SQLAppender" type="log4netAsync.AsyncAdoNetAppender,log4netAsync" | | |
| | bufferSize | value="1000" | | |
| | connectionType | value="System.Data.SqlClient.SqlConnection, System.Data, Version=1.0.3300.0, Culture=neutral, PublicKeyToken=b77a5c561934e089" | | |
| | connectionString | value="data source=<DatabaseAddress>;Network Library=DBMSSOCN;initial catalog=BMS_LOG;integrated security=SSPI;persist security info=False;Pooling=true;Min Pool Size=0;Max Pool Size=250;" | | |
| | commandText | value="INSERT INTO Log ([Date],[Thread],[Level],[Logger],[Message],[Exception]) VALUES (@log_date, @thread, @log_level, @logger, @message, @exception)" | value="data source=<DatabaseAddress>; Network Library=DBMSSOCN;initial catalog=BMS_LOG;integrated security=SSPI;persist security info=False;Pooling=true;Min Pool Size=0;Max Pool Size=250;" | value="data source=<DatabaseAddress>;initial catalog=LOG;integrated security=SSPI;persist security info=False;Pooling=true;Min Pool Size=0;Max Pool Size=100;" |
| | parameter | | | |
| | parameterName | value="@log_date" | | |
| | dbType | value="DateTime" | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|------------------------|--|-------------------------------|------------------------|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | layout | type="log4net.Layout.RawTimeStampLayout" | | |
| | parameter | | | |
| | parameterName | value="@thread" | | |
| | dbType | value="String" | | |
| | size | value="255" | | |
| | layout | type="log4net.Layout.PatternLayout" | | |
| | conversionPattern | value="%thread" | | |
| | parameter | | | |
| | parameterName | value="@log_level" | | |
| | dbType | value="String" | | |
| | size | value="50" | | |
| | layout | type="log4net.Layout.PatternLayout" | | |
| | conversionPattern | value="%level" | | |
| | parameter | | | |
| | parameterName | value="@logger" | | |
| | dbType | value="String" | | |
| | size | value="255" | | |
| | layout | type="log4net.Layout.PatternLayout" | | |
| | conversionPattern | value="%logger" | | |
| | parameter | | | |
| | parameterName | value="@message" | | |
| | dbType | value="String" | | |
| | size | value="4000" | | |
| | layout | type="log4net.Layout.PatternLayout" | | |
| | conversionPattern | value="%message" | | |
| | parameter | | | |

| Section | Configuration Key/Name | Configuration values (ex.) | | Descript ion |
|---------|------------------------|---|--------------------------------|--|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.c onfig | BMS.ServiceHost.config |
| | parameterName | value="@exception" | | |
| | dbType | value="String" | | |
| | size | value="2000" | | |
| | layout | type="log4net.Layout.ExceptionLayout" | | |
| | filter | type="log4net.Filter.StringMatchFilter" | | |
| | stringToMatch | value="00:00:00.00" | | do not log messages with durations under 00:00:00.00* |
| | acceptOnMatch | value="false" | | |
| | filter | type="log4net.Filter.StringMatchFilter" | | |
| | stringToMatch | value="Entry" | | do not log entry messages as they are not relevant duration-wise |

| Section | Configuration Key/Name | Configuration values (ex.) | | Description |
|---------|------------------------|--|-------------------------------|------------------------|
| | | Split Service | | Combine Service |
| | | BMS.ServiceHost.config | BMS.VI.ServiceHost.exe.config | BMS.ServiceHost.config |
| | acceptOnMatch | value="false" | | |
| | startup | | | |
| | supportedRuntime | version="v4.6" sku=".NETFramework,Version=v4.6.1" | | |
| | runtime\gcServer | enabled="true" | | |
| | | | | |

Table 5-EIS Service Configuration Parameters

| File | Section | Configuration key | Configuration values (ex.) | Description |
|---|---|---|--|--|
| EISService Implementation. dll.config | configuration/ connectionStrings/ add | ConnectionString | Workstation id= vadbserver\sql2008r2;packet size=4096;data source= vadbserver \sql2008r2;persist security info=False;Initial Catalog=BMS_EIS;Integrated Security=SSPI; | Connection string for the connection to the BMS_EIS database. |
| | configuration/ appSettings/ key | DatasetPath | DBRepository | Data Adapters (XML mapping files) path. |
| | | OverwriteCreateEntityId | true/false | If set to true, the service generates a new unique identifier on each resource create call, otherwise, it uses the identifier received as parameter. If set to true, the service notifies linked |
| | | NotificationIndicator | true/false | EIS services of changes produced on entities. |
| | | UseSecurityContext | 0/1 | ePractice security context |
| | | DnsIdentity | IWHM3Services | Certificate which specifies the service's dns identity. |
| | | ReceiveIndicator | true/false | If set to true, the service accepts notification messages from linked EIS services. |
| | | AutomaticLinkIndicator | true/false | If set to true, entities are automatically linked (associated as equivalent) across linked EIS services. |
| | | XEISIndicator | true/false | Specifies whether the cross EIS worker should be started. |
| XEISDomain | domain name | Domain of the cross EIS implementation. | | |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------|--|------------------------|--|---|
| | | SubscriptionTopic | entity | Specifies the topic of the synchronization subscription, meaning what should be synced. |
| | | AuditProtocol | none/udp | Transfer protocol to communicate with the audit service or none if not used. |
| | | AuditServer | auditserver | Server where the audit service resides. |
| | | AuditPort | 10000 | Port of the audit service on the specified server. |
| | | AuditSynchronIndicator | true/false | Specifies if the Audit Service should be called synchronous or asynchronous. |
| | configuration/ system.serviceModel/behaviors/endpointBehaviors/behavior/clientCredentials/serviceCertificate/scopedCertificates/add | targetUri | http://vaserver:17050/STS/Windows | URI of STS certificate. |
| | configuration/ system.serviceModel/bindings/wsFederationHttpBinding/binding/message/issuerMetadata | address | http://vaserver:17050/STS/mex | STS metadata exchange URL used by ServiceBinding. |
| | configuration/ system.serviceModel/bindings/wsFederationHttpBinding/binding/security/message/issuer | address | http://vaserver:17050/STS/Windows | STS URL used by WinBinding. |
| | configuration/ system.serviceModel/services/serviceHost/baseAddress/add | baseAddress | http://vaserver:17050/QueryFunctions | EIS Query Functions service endpoint address. |
| | configuration/ system.serviceModel/services/serviceHost/baseAddress/add | baseAddress | http://vaserver:17050/Administration | EIS Administration service endpoint address. |
| | configuration/ system.serviceModel | baseAddress | http://vaserver:17050/EntityManagement | EIS EntityManagement service endpoint address. |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------|---|-------------------|--|---|
| | el/services/service/host/baseAddress/add | | | |
| | configuration/system.serviceModel/services/service/host/baseAddress/add | baseAddress | http://vaserver:17050/ServiceMetadataManagement | EIS ServiceMetadataManagement service endpoint address. |
| | configuration/system.serviceModel/services/service/host/baseAddress/add | baseAddress | http://vaserver:17050/BulkEntityManagement | EIS Bulk BulkEntityManagement service endpoint address. |
| | configuration/system.serviceModel/services/service/host/baseAddress/add | baseAddress | http://vaserver:17050/Subscribe | EIS Subscribe service endpoint address. |
| | configuration/system.serviceModel/services/service/host/baseAddress/add | baseAddress | http://vaserver:17050/LinkAlgorithmAdministration | EIS LinkAlgorithmAdministration service endpoint address. |
| | configuration/system.serviceModel/services/service/host/baseAddress/add | baseAddress | http://vaserver:17050/EIS/SubscriptionAdministration | EIS SubscriptionAdministration service endpoint address. |
| | configuration/system.serviceModel/services/service/host/baseAddress/add | baseAddress | http://vaserver:17050/Receive | EIS Receive service endpoint address. |
| | configuration/system.serviceModel/services/service/host/baseAddress/add | baseAddress | http://vaserver:17050/EIS/MessageAdministration | EIS MessageAdministration service endpoint address. |
| | configuration/system.serviceModel/services/service/host/baseAddress/add | baseAddress | http://vaserver:17050/EIS/AuthorizationSubscriber | EIS AuthorizationSubscriber service endpoint address. |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|-----------------|------------------------------------|-------------------|---|--|
| | add | | | |
| Connections.xml | MyConnections/ connectionString | connectionString | workstation id= vadbserver\sql2008r2;packet size=4096;data source= vadbserver\sql2008r2;persist security info=False;Initial Catalog=BMS_EIS;Integrated Security=SSPI; | Connection string for the connection to the BMS_EIS database. |

Table 6-EVS Service Configuration Parameters

| File | Section | Configuration key | Configuration values (ex.) | Description | |
|----------------------------------|---------------------------------------|--|----------------------------|---|--|
| MessageImpl.dll. config | configuration/ appSettings/ key | DatasetPath | DBRepository | Data Adapters (XML mapping files) path. | |
| | | ApplicationFolder | D:\CTS\CTSImport | String path to application folder. | |
| | | SqlScriptsFolder | SqlScripts | SQL scripts folder name. | |
| | | TextFilesFolder | TextFiles | Text files folder name. | |
| | | PackageFilesFolder | PackageFiles | Package files folder name. | |
| | | CodeMappingTempTable | dbo.TempMapping | The mapping temporary table name. | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | TemporaryFolder | Temp | Temporary folder name. | |
| | | SubscriptionTopic | cts | Specifies the topic of the synchronization subscription, meaning what should be synced. | |
| | | NotificationIndicator | true/false | Notification indicator. | |
| | | BulkInsertBatchSize | 1000 | Maximum number of processed records in one step. | |
| DnsIdentity | IWHM3Services | Certificate which specifies the service's dns identity. | | | |
| StartSecurityEndpoints | true/false | Specifies if the secure endpoints are to be started. | | | |
| http://localhost:17050/CTSImport | EVS | EVS import from excel key. | | | |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------|---|-----------------------------------|--|--|
| | | http://localhost:17050/CTSEExport | EVS | EVS export to excel key. |
| | configuration/ system.serviceModel/services/serviceHost/baseAddresses/ | baseAddress | http://vaserver:17050/ CTSVocabularyRuntime | CTS VocabularyRuntime service endpoint address (HTTP Protocol). |
| | | baseAddress | https://vaserver:17706/ | CTS VocabularyRuntime service endpoint address (HTTPS Protocol). |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------|--|-------------------|--|---|
| | add | | CTSVocabularyRuntime | |
| | configuration/ system.serviceModel/services/serviceHost/baseAddresses/ add | baseAddress | http://vaserver:17050/ CTSMapping | CTS Mapping service endpoint address (HTTP Protocol). |
| | | baseAddress | https://vaserver:17706/ CTSMapping | CTS Mapping service endpoint address (HTTPS Protocol). |
| | configuration/ system.serviceModel/services/serviceHost/baseAddresses/ add | baseAddress | http://vaserver:17050/ CTSVocabularyBrowse | CTS VocabularyBrowse service endpoint address (HTTP Protocol). |
| | | baseAddress | https://vaserver:17706/ CTSVocabularyBrowse | CTS VocabularyBrowse service endpoint address (HTTPS Protocol). |
| | configuration/ system.serviceModel/services/serviceHost/baseAddresses/ add | baseAddress | http://vaserver:17050/ CTSMMessageRuntime | CTS MessageRuntime service endpoint address (HTTP Protocol). |
| | | baseAddress | https://vaserver:17706/ CTSMMessageRuntime | CTS MessageRuntime service endpoint address (HTTPS Protocol). |
| | configuration/ system.serviceModel/services/serviceHost/baseAddresses/ add | baseAddress | http://vaserver:17050/ CTSMMessageBrowse | CTS MessageBrowse service endpoint address (HTTP Protocol). |
| | | baseAddress | https://vaserver:17706/ CTSMMessageBrowse | CTS MessageBrowse service endpoint address (HTTPS Protocol). |
| | configuration/ system.serviceModel/services/serviceHost/baseAddresses/ add | baseAddress | http://vaserver:17050/ CTSMMessageEdit | CTS MessageEdit service endpoint address (HTTP Protocol). |
| | | baseAddress | https://vaserver:17706/ CTSMMessageEdit | CTS MessageEdit service endpoint address (HTTPS Protocol). |
| | configuration/ | baseAddress | http://vaserver:17050/ CTSVocabularyEdit | CTS VocabularyEdit service endpoint address (HTTP Protocol). |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------|--|-------------------|--|---|
| | system.serviceModel/services/serviceHost/baseAddresses/ | baseAddress | https://vaserver:17706/CTSVocabularyEdit | CTS VocabularyEdit service endpoint address (HTTPS Protocol). |
| | configuration/system.serviceModel/services/serviceHost/baseAddresses/add | baseAddress | http://vaserver:17050/CTSMappingEdit | CTS MappingEdit service endpoint address (HTTP Protocol). |
| | configuration/system.serviceModel/services/serviceHost/baseAddresses/add | baseAddress | https://vaserver:17706/CTSMappingEdit | CTS MappingEdit service endpoint address (HTTPS Protocol). |
| | configuration/system.serviceModel/services/serviceHost/baseAddresses/add | baseAddress | http://vaserver:17050/Xaml | XAML service endpoint address. |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------|--|-------------------|--|---|
| | ost/baseAddresses/add | | | |
| | configuration/system.serviceModel/services/serviceHost/baseAddresses/add | baseAddress | http://vaserver:17050/EVSWrapper | EVS Wrapper service endpoint address. |
| | configuration/system.serviceModel/services/serviceHost/baseAddresses/add | baseAddress | http://vaserver:17050/CTSImport | CTS Import service endpoint address. |
| | configuration/system.serviceModel/services/serviceHost/baseAddresses/add | baseAddress | http://vaserver:17050/CTSExport | CTS Export service endpoint address. |
| | configuration/system.serviceModel/services/serviceHost/baseAddresses/add | baseAddress | http://vaserver:17050/CTSEditBulk | CTS EditBulk service endpoint address. |
| | configuration/system.serviceModel/services/serviceHost/baseAddresses/add | baseAddress | http://vaserver:17050/CTS/SubscriptionAdministration | CTS Subscription Administration service endpoint address. |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------|--|-------------------|---|--|
| | configuration/system.serviceModel/services/service/host/baseAddresses/add | baseAddress | http://vaserver:17050/CTS/MessageAdministration | CTS Message Administration service endpoint address. |
| | configuration/system.serviceModel/bindings/wsFederationHttpBinding/binding/security/message/issuerMetadata | address | http://vaserver:17050/STS/mex | STS metadata exchange URL used by ServiceBinding. |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|-----------------------|--|-------------------|-----------------------------------|---------------------------------------|
| | configuration/system.serviceModel/bindings/wsFederationHttpBinding/binding/security/message/issuer | address | http://vaserver:17050/STS/Windows | STS URL used by WinBinding. |
| EVSWrapper.dll.config | configuration/system.serviceModel/services/service/host/baseAddresses/add | baseAddress | http://vaserver:17050/EVSWrapper | EVS Wrapper service endpoint address. |

Table 7-PAP Service Configuration Parameters

| File | Section | Configuration key | Configuration values (ex.) | Description | |
|---|---|---------------------------------------|---|---|--|
| PolicyAdministration Point.dll.config | configuration/ appSettings/ | DefaultResourceRoot | VA | Default root for identifiers. | |
| | | DatasetPath | DBRepository | Data Adapters (XML mapping files) path. | |
| | | su | hmcomplus | Specifies the super user of the application. | |
| | | SubscriptionTopic | Authorization | Specifies the topic of the synchronization subscription, meaning what should be synced. | |
| | key | | | | |
| | | DnsIdentity | IWHM3Services | Certificate which specifies the service's dns identity. | |
| | | AuditProtocol | none/udp | Transfer protocol to communicate with the audit service or none if not used. | |
| | | AuditServer | auditserver | Server where the audit service resides. | |
| | | AuditPort | 10000 | Port of the audit service on the specified server. | |
| | configuration/ connectionStrings/ add | connectionString | workstation id= vadbserver\sql2008r2;packet size=4096;data source= vadbserver\sql2008r2;persist security info=False;Initial Catalog=BMS_AUTHZ;Integrated Security=SSPI; | Connection string for the connection to the BMS_AUTHZ database. | |
| configuration/syste m.serviceModel/ bindings/ wsFederationHttpBi | address | http://vaserver:17050/STS/ Windows | STS URL used by UpnBinding. | | |
| | nding/binding/securi ty/message/issuer | | | | |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|-----------------|--|-------------------|--|---|
| | configuration/system.serviceModel/bindings/wsFederationHttpBinding/binding/security/message/issuer | address | http://vaserver:17050/STS/Windows | STS URL used by WinBinding. |
| | configuration/system.serviceModel/services/service/host/baseAddresses/add | baseAddress | http://vaserver:17050/PAP | PAP service endpoint address. |
| | configuration/system.serviceModel/services/service/host/baseAddresses/add | baseAddress | http://vaserver:17050/AuthorizationPublisher | AuthorizationPublisher service endpoint address. |
| | configuration/system.serviceModel/services/service/host/baseAddresses/add | baseAddress | http://vaserver:17050/PAP/MessageAdministration | MessageAdministration service endpoint address. |
| | configuration/system.serviceModel/services/service/host/baseAddresses/add | baseAddress | http://vaserver:17050/PAP/SubscriptionAdministration | SubscriptionAdministration service endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/PDP/Request | PDP request client endpoint address. |
| | configuration/system.serviceModel/behaviors/endpointBehaviors/behavior/clientCredentials/serviceCertificate/scopedCertificates/add | targetUri | http://vaserver:17050/STS/Windows | URI of STS certificate. |
| Connections.xml | MyConnections/MyConnection/ | connectionString | workstation id= vadbserver\sql2008r2;packet | Connection string for the connection to the BMS_AUTHZ database. |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------|------------------|-------------------|---|-------------|
| | ConnectionString | | size=4096;data source= vadbserver\sql2008r2;persist security info=False;Initial Catalog=BMS_AUTHZ;Integrated Security=SSPI; | |

Table 8-PDP Service Configuration Parameters

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------------------------------------|--|---------------------|--|--|
| PolicyDecision Point.dll.config | configuration/ appSettings/ key | DefaultResourceRoot | VA | Default root for identifiers. |
| | configuration/ key | ConnectionString | Data source=vadbserver\sql2008; InitialCatalog=BMS_AUTHZ;Persist Security Info=False;Integrated Security=SSPI | Connection string for the connection to the BMS_AUTHZ database. |
| | system.serviceMod el/bindings/ wsFederationHttpBi nding/binding/securi ty/message/issuerM etadata | address | http://vaserver:17050/STS/mex | STS metadata exchange URL used by ServiceBinding. |
| | configuration/ system.serviceMod el/services/service/h ost/baseAddresses/ add | baseAddress | http://vaserver:17050/PDP | PDP service endpoint address. |
| | configuration/ system.serviceMod el/services/service/h ost/baseAddresses/ add | baseAddress | http://vaserver:17050/PDP/ Request | PDP Request service endpoint address. |

Table 9-RS Service Configuration Parameters

| File | Section | Configuration key | Configuration values (ex.) | Description |
|---|--|--------------------------|-----------------------------------|--|
| RS.Service Implementation. | configuration/ appSettings/ | DefaultResourceRoot | VA | Default root for identifiers. |
| | | ReportingServicesURL | http://vaserver:90/Report | Reporting services URL address. |
| dll.config | key | | Server/ReportService2005. asmx | |
| | | RootFolderName | Reporting Service | Reports root folder in the reporting services. |
| | | AuditProtocol | none/udp | Transfer protocol to communicate with the audit service or none if not used. |
| | | AuditServer | auditserver | Server where the audit service resides. |
| | | AuditPort | 10000 | Port of the audit service on the specified server. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/PDP/Request | PDP request client endpoint address. |
| | configuration/system.serviceModel/bindings/wsFederationHttpBinding/binding/security/message/issuerMetadata | address | http://vaserver:17050/STS/mex | STS metadata exchange URL used by ServiceBinding. |
| | configuration/system.serviceModel/bindings/wsFederationHttpBinding/binding/security/message/issuer | address | http://vaserver:17050/STS/Windows | URL of CustomBinding_IAuthenticationService. |
| configuration/system.serviceModel/services/service/host/baseAddresses/add | baseAddress | http://vaserver:17050/RS | RS service endpoint address. | |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------|--|-------------------|---------------------------------------|-------------------------|
| | configuration/ system.serviceModel/behaviors/ endpointBehaviors/ behavior/ clientCredentials/ serviceCertificate/ scopedCertificates/add | targetUri | http://vaserver:17050/STS/ Windows | URI of STS certificate. |

Table 10-STS Service Configuration Parameters

| File | Section | Configuration key | Configuration values (ex.) | Description | |
|-----------------------------------|---------------------------------------|---------------------------------|----------------------------|--|---------------|
| SecureToken Service.dll.config | configuration/ appSettings/ key | Delay | 0:01:00 | Sleep interval between the retries to insert the superusers in the database. | |
| | | TokenTTLInMinutes | 1442 | Time to live of the security token, in minutes. | |
| | | STSCertificateStoreName | My | Specifies the name of the X.509 certificate store to open. | |
| | | STSCertificateStoreLocation | LocalMachine | Specifies the location of the X.509 STS certificate store. | |
| | | STSCertificateFindType | FindBySubjectName | Specifies the type of value the X509Certificate2Collection.Find method | |
| | | | | | |
| | | | | | |
| | | | | | searches for. |
| | | STSCertificateFindValue | IWHM3STS | STS Certificate name. | |
| | | ServiceCertificateStoreName | My | Specifies the name of the X.509 certificate store to open. | |
| | | ServiceCertificateStoreLocation | LocalMachine/CurrentUser | Specifies the location of the X.509 services' certificate store. | |
| | | ServiceCertificateFindType | FindBySubjectName | Specifies the type of value the X509Certificate2Collection.Find method searches for. | |
| ServiceCertificateFindValue | IWHM3Services | Services' Certificate name. | | | |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------|---|-------------------|---|--|
| | | su | Domain qualified user names, comma separated. | Usernames of all the super users in the application. |
| | | domains | VA VA | Comma separated list of root extension values for the application's domains. |
| | configuration/ connectionStrings/ add | connectionString | workstation id= vadbserver\sql2008r2;packet size=4096;data source= vadbserver\sql2008;persist security info=False;Initial Catalog=BMS_AUTHZ;Integrated Security=SSPI; | Connection string for the connection to the BMS_AUTHZ database. |
| | configuration/ system.serviceMod el/services/service/ host/baseAddresse s/add | baseAddress | http://vaserver:17050/STS | STS service endpoint address. |
| | configuration/ system.serviceMod el/services/service/ | baseAddress | http://vaserver:17050/authsvc | Authsvc service endpoint address. |
| | configuration/ system.serviceMod el/bindings/ wsFederationHttpBi nding/binding/securi | address | http://vaserver:17050/STS/mex | STS metadata exchange URL used by ServiceBinding. |
| | configuration/ system.serviceMod el/bindings/ wsFederationHttpBi nding/binding/securi ty/message/issuer | address | http://vaserver:17050/STS/ Windows | URL of STS used by WindowsBinding. |
| | configuration/ system.serviceMod el/bindings/ wsFederationHttpBi nding/binding/securi ty/message/issuer/i dentity/userPrincipal Name | value | VAUser@domain.com | Name of the user under which the service is running. |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------|---|-------------------|-------------------------------|--|
| | configuration/ system.serviceModel/behaviors/serviceBehaviors/behavior/serviceMetadata | httpGetUrl | http://vaserver:17050/STS/mex | Metadata exchange address of ServiceSTSBehavior. |

Table 11-Win ServiceHost Configuration Parameters

| File | Section | Configuration key | Configuration values (ex.) | Description |
|---------------------------|-------------------------------|---------------------------------|----------------------------|--|
| WinServiceHost.exe.config | configuration/appSettings/key | LocalServer | yes/no | ePractice remoting flag. Only used with yes. |
| | | UseSecurityContext | 0/1 | Flag which specifies if ePractice uses the security context. |
| | | AuditProtocol | none/udp | Transfer protocol to communicate with the audit service or none if not used. |
| | | ServiceStartupTimeoutSecondsAdd | 90 | Time in seconds to wait for the services to start |
| | | AuditServer | auditserver | Server where the audit service resides. |
| | | AuditPort | 10000 | Port of the audit service on the specified server. |
| | | ServiceCertificateStoreName | My | Specifies the name of the X.509 certificate store to open. |
| | | ServiceCertificateStoreLocation | LocalMachine | Specifies the location of the X.509 services' certificate store. |
| | | ServiceCertificateFindType | FindBySubjectName | Specifies the type of value the X509Certificate2Collection.Find method searches for. |
| | | ServiceCertificateFindValue | IWHM3Services | Services' Certificate name. |

Table 12-WMI User Group Configuration Parameters

| File | Section | Configuration key | Configuration values (ex.) | Description |
|-------------------|---|-------------------------|--|--|
| WMI_UserGroup.exe | configuration/ appSettings/ key | DatasetPath | DBRepository | Data Adapters (XML mapping files) path. |
| | | LocalMachineName | Localhost | Name of the host where WMI_UserGroup will run. |
| | | IsRunningOnLocalMachine | true/false | Specify if WMI_UserGroup will run on local machine or not. |
| Connections.xml | MyConnections/ MyConnection/ ConnectionString | ConnectionString | packet size=4096;data source= vadbserver\sql2008r2;persist security info=False;Initial Catalog=BMS_DW;Integrated Security=SSPI;connection timeout = 600 | Connection string for the connection to the BMS_DW database. |

Table 13-Policy Manager Configuration Parameters

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------|--|---------------------|----------------------------|--|
| | configuration/ appSettings/ key | DefaultResourceRoot | VA | Default root for identifiers. |
| | | AuditProtocol | none/udp | Transfer protocol to communicate with the audit service or none if not used. |
| | | AuditServer | auditserver | Server where the audit service resides. |
| | | AuditPort | 10000 | Port of the audit service on the specified server. |
| | configuration/ | | | |
| | | | | |
| | system.serviceModel/ bindings/wsFederationHttpBinding/ binding/security/message/issuer | address | http://vaserver:17050/STS/ | STS address used by wsFederationBinding binding |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|--------------------------|---|-------------------|--|---|
| PolicyManager.exe.config | configuration/system.serviceModel/behaviors/endpointBehaviors/behavior/clientCredentials/scopedCertificates/add | targetUri | http://vaserver:17050/STS/ | STS address of STS certificate. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/PAP | PAP client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/AuthorizationPublisher | AuthorizationPublisher client endpoint address. |
| PolicyEditor.dll.config | configuration/system.serviceModel/client | address | http://vaserver:17050/PAP | PAP client endpoint address. |

Table 14-BMS Web Configuration Parameters

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------------|----------------------------|------------------------------|---|--|
| Web.config | configuration/appSettings/ | webpages:Version | 1.0.0.0 | Version of the web site. |
| | | ClientValidationEnabled | true/false | Gets or sets a value that indicates whether client-side validation is enabled. |
| | key | UnobtrusiveJavaScriptEnabled | true/false | Gets or sets a value that indicates whether unobtrusive JavaScript is enabled. |
| | | ReportsPath | /BMS | Path of the reports in the reporting services. |
| | | BMS.EVSDictionaryCacheSize | 512 | Cache size for the vocabulary service, representing the number of concepts cached. |
| | | VAURL | http://vaww.esm.infoshare.va.gov/PMIC/Projects/BMS/Implement/default.aspx | BMS Sharepoint Site. |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------|---------|-------------------------------------|--|--|
| | | TICKETURL | http://vaww.esm.infoshare.va.gov/PMIC/Projects/BMS/Implement/HDPProcess/default.aspx | Enter a defect and enhancement ticket. |
| | | WhiteboardRefreshRate | 60 | Time in seconds of refresh rate of the whiteboard page. |
| | | THRESHOLD | 0 | Threshold value used to compare wait time value of the patient from the Patients Pending Placement List in order to display an alert on the Patients Pending Placement List. |
| | | aspnet:MaxHttpCollectionKeys | 2000 | Maximum number of aps.net collection keys. |
| | | WhiteboardAjaxRefreshRate | 180 | Time in seconds of AJAX refresh rate of the whiteboard page. |
| | | WhiteboardRealRefreshRate | 60 | Time in minutes of standard refresh rate of the whiteboard page. |
| | | HomePageRefreshRate | 300 | Time in seconds of refresh rate of the home page. |
| | | BMS_EIS_GET_ENTITY_FILTER_PAGE_SIZE | 1000 | Number of records queried that are brought from EIS in one page. |
| | | BMS_EVS_GET_CONCEPT_PAGE_SIZE | 1000 | Number of records queried that are brought from EVS in one page. |
| | | SmtpHost | VA_MAIL_SERVER | Mail Server host. |
| | | DisplayDetailedErrorMessage | true/false | If set to true displays detailed error message, otherwise displays a generic message ("Please contact BMS administrator."). |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------|---------|------------------------|-------------------------------------|--|
| | | Is_IIS_Single_Instance | true/false | If set to true a single IIS instance is used. If set to false multiple IIS instances are used (web farm scenario). |
| | | ProxyPoolMaxCount | 100 | The maximum number of proxies in the pool. |
| | | MdwsEndpointUrl_1 | http://mdws_server:81/QuerySvc.asmx | MDWS instance URL address. |
| | | MdwsEndpointUrl_2 | http://mdws_server:82/QuerySvc.asmx | MDWS instance URL address. |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------|--|-------------------|---|--|
| | configuration/system.serviceModel/bindings/wsFederationHttpBinding/binding/security/message/issuer | address | http://vaserver:17050/STS/Windows | STS Windows address used by WindowsBinding. |
| | configuration/system.serviceModel/bindings/wsFederationHttpBinding/binding/security/message/issuer | address | http://vaserver:17050/STS/ | STS address used by WSFederationHttpBinding_Authenticated Service binding. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/authsvc/upnidentity | Security Authentication client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/RS | Reporting Services client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/QueryFunctions | EIS QueryFunctions client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/QueryFunctions | EIS QueryFunctions Windows authentication client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/EntityManagement | EIS EntityManagement client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/EntityManagement | EIS EntityManagement Windows authentication client endpoint address. |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------|---|-------------------|----------------------------|---|
| | client/endpoint | | | |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/PAP | PAP client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/PAP | PAP Windows authentication client endpoint address. |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------|---|-------------------|--|---|
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/PDP | PDP client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/PDP | PDP Windows authentication client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/CTSVocabularyRuntime | CTS VocabularyRuntime client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/CTSVocabularyBrowse | CTS VocabularyBrowse client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/CTSMessageBrowse | CTS MessageBrowse client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/CTSMessageRuntime | CTS MessageRuntime client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/CTSMessageEdit | CTS MessageEdit client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/CTSVocabularyEdit | CTS VocabularyEdit client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/BMSConfigurationOperations | BMS ConfigurationOperations client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | http://vaserver:17050/BMSConfigurationOperations | BMS ConfigurationOperations Windows authentication client endpoint address. |

| File | Section | Configuration key | Configuration values (ex.) | Description |
|------|---|-------------------|---|---|
| | configuration/system.serviceModel/client/endpoint | address | <i>http://vaserver:17050/BMSQuery</i> | BMS Query client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | <i>http://vaserver:17050/BMSOperations</i> | BMS Operations client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | <i>http://vaserver:17050/TransferWF</i> | Transfer workflow client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | <i>http://vaserver:17050/BMSWF</i> | BMS workflow client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | <i>http://vaserver:17050/WaitingListWF</i> | Patients Pending Placement List workflow client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | <i>http://vaserver:17050/BedCleanWF</i> | Bed clean workflow client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | <i>http://vaserver:17050/BedUnavailableWF</i> | Bed Unavailable workflow client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | <i>http://vaserver:17050/VistaQuery</i> | Vista Query client endpoint address. |
| | configuration/system.serviceModel/client/endpoint | address | <i>http://vaserver:17050/VistaQuery</i> | Vista Query Windows authentication client endpoint address. |

2.4 Scheduled Windows and SQL Jobs Configuration

BMS runs one Windows Scheduled task: BMS – WMI_UserGroup and two SQL Jobs in order to bring data into the data warehouse (BMS_DW database): BMS - Reports Full and BMS – Reports Incremental. More information about BMS databases can be referenced from [Section 3.3](#).

2.4.1 BMS Reports Full

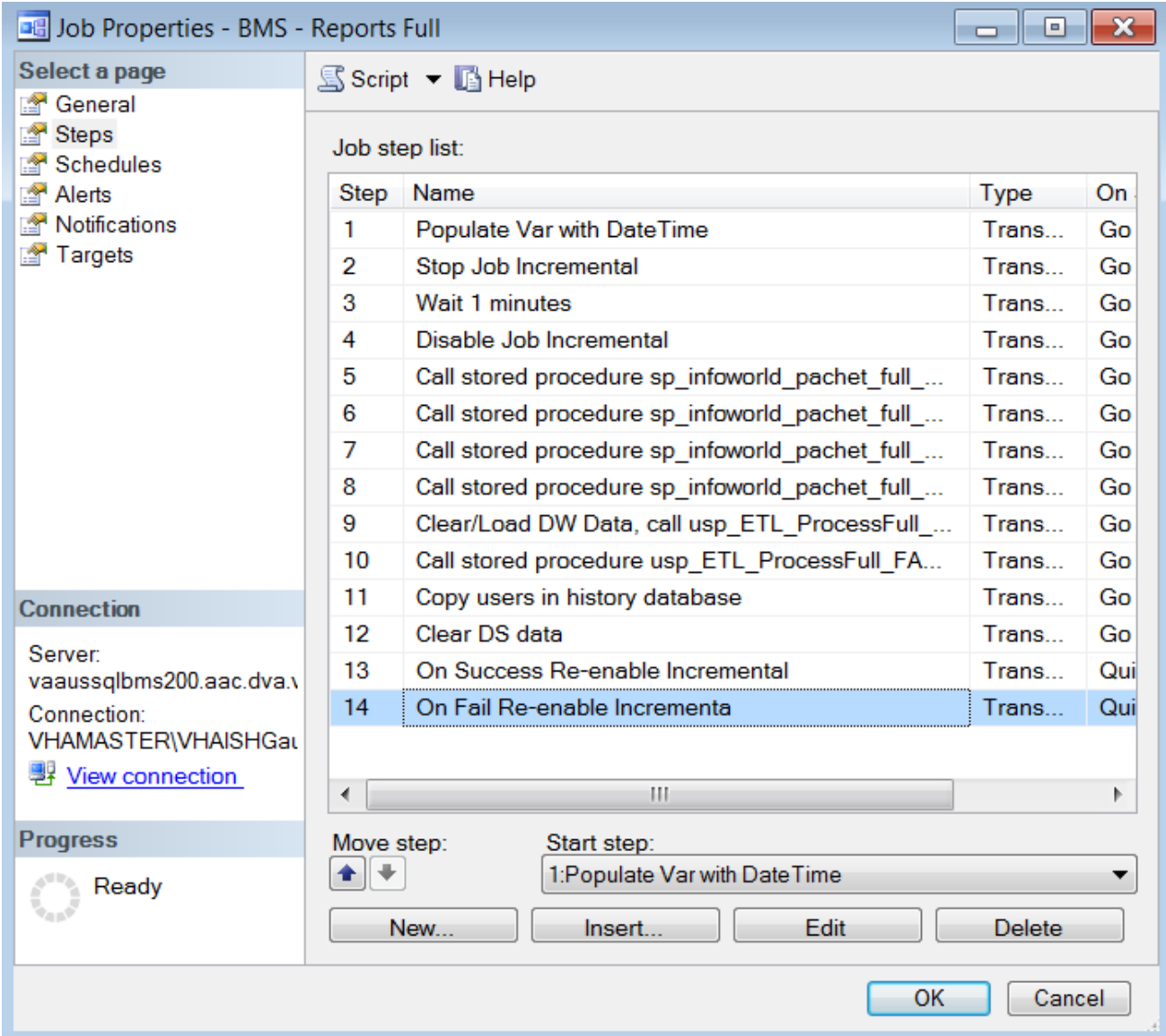


Figure 2-BMS-Report Full Job

The job’s steps can be seen in the figure above and most of them execute stored procedures. At the beginning of the process, the operations are done between the source databases and the destination database, which is BMS_DS in our case.

Each step is described below:

Step 1. Start job full: this is only an informative step for the log file.

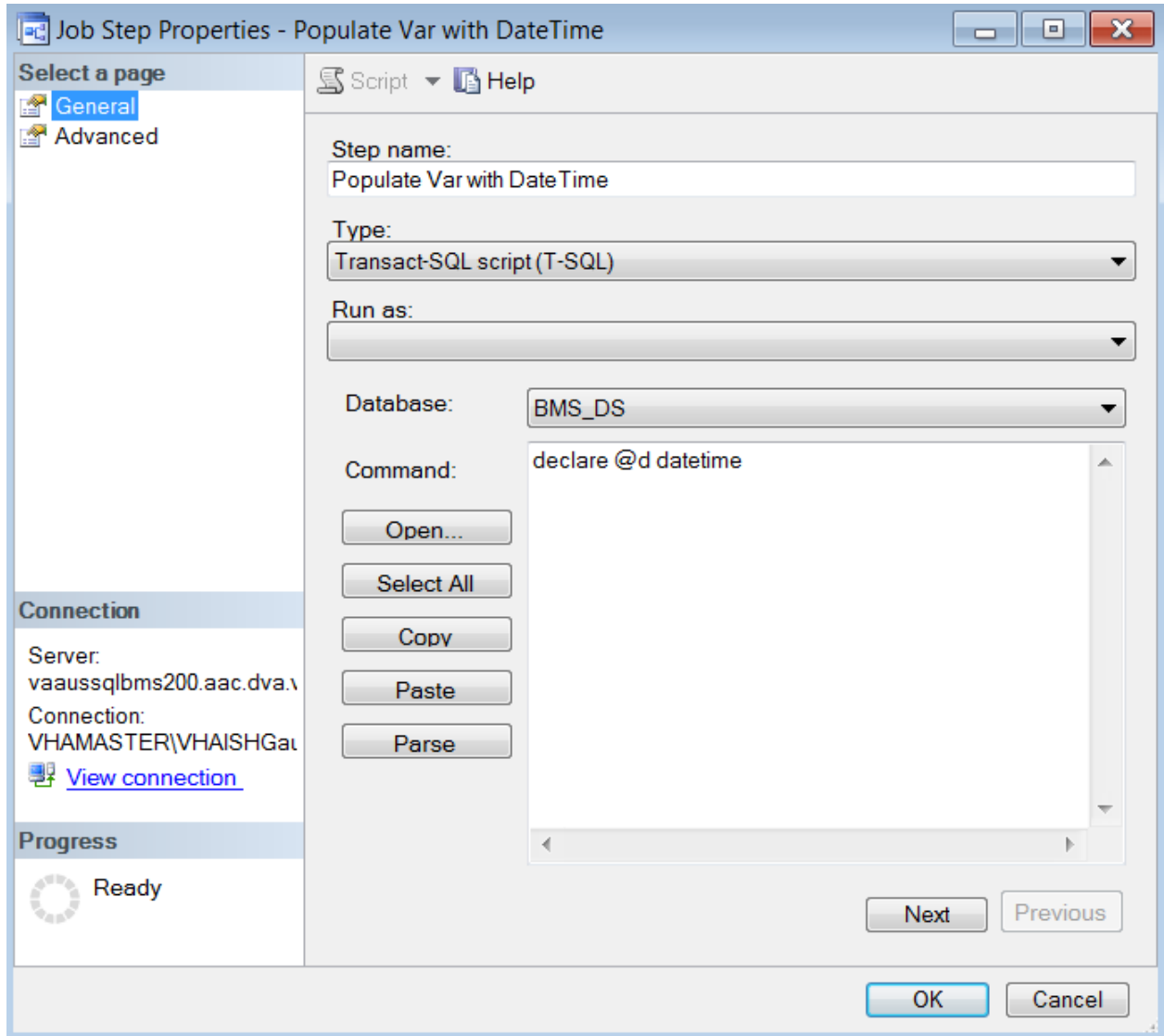


Figure 3-BMS-Start Full Job

Step 2. Check state job incremental: it checks the state of the BMS incremental and attempts to stop the incremental job.

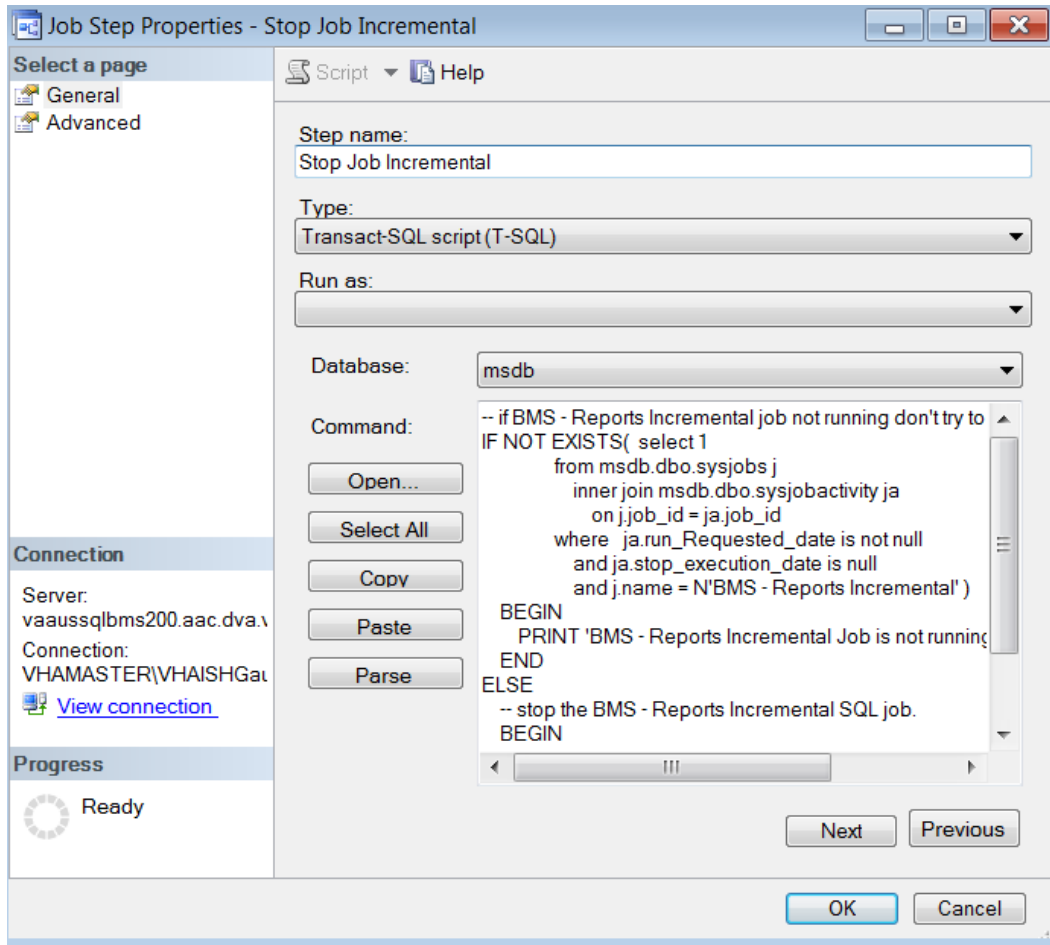


Figure 4-BMS-Check State Job Incremental

Step 3. Waits 1 min for incremental job to stop:

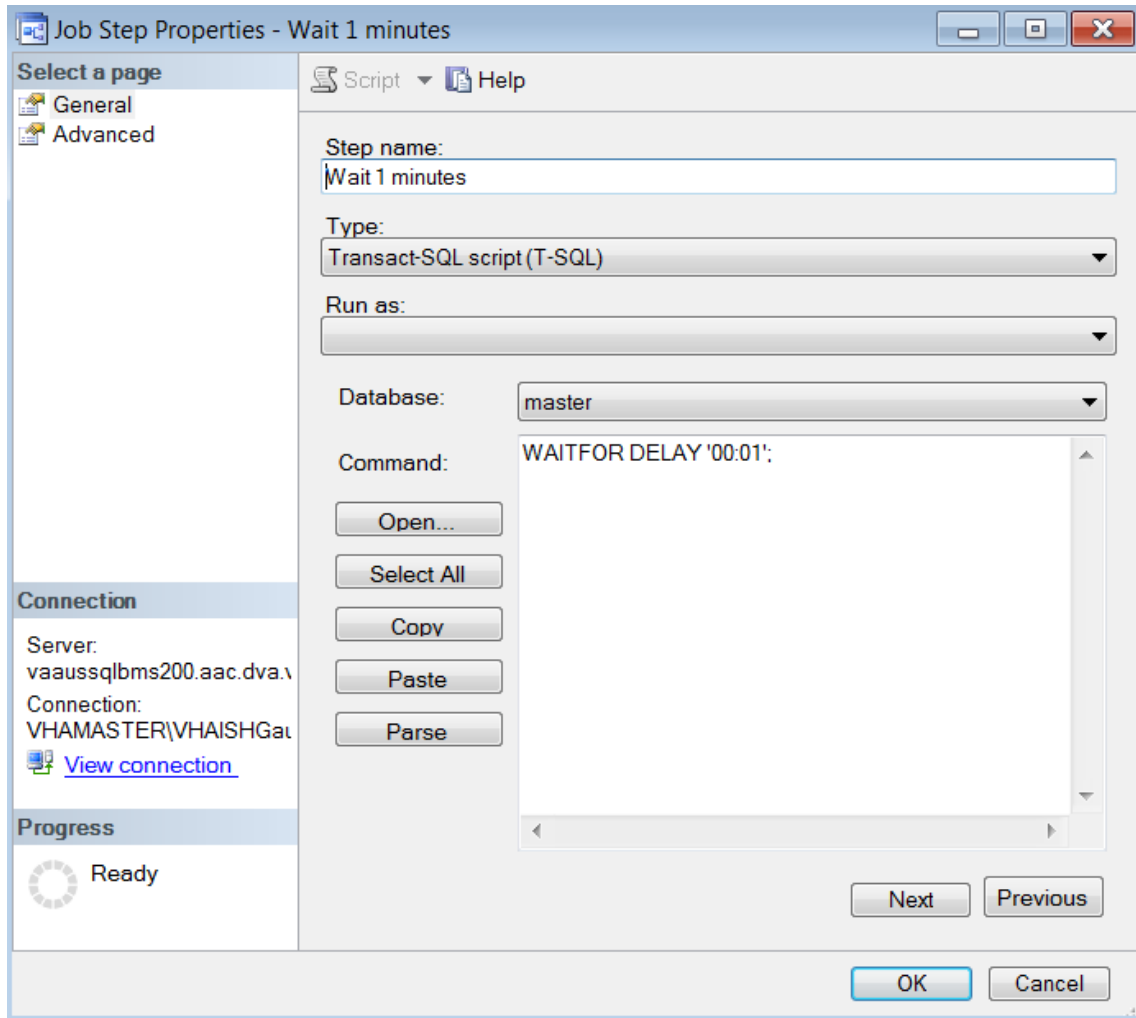


Figure 5-BMS-Waits 1 Min for Incremental Job to stop

Step 4. Disable Incremental Job:

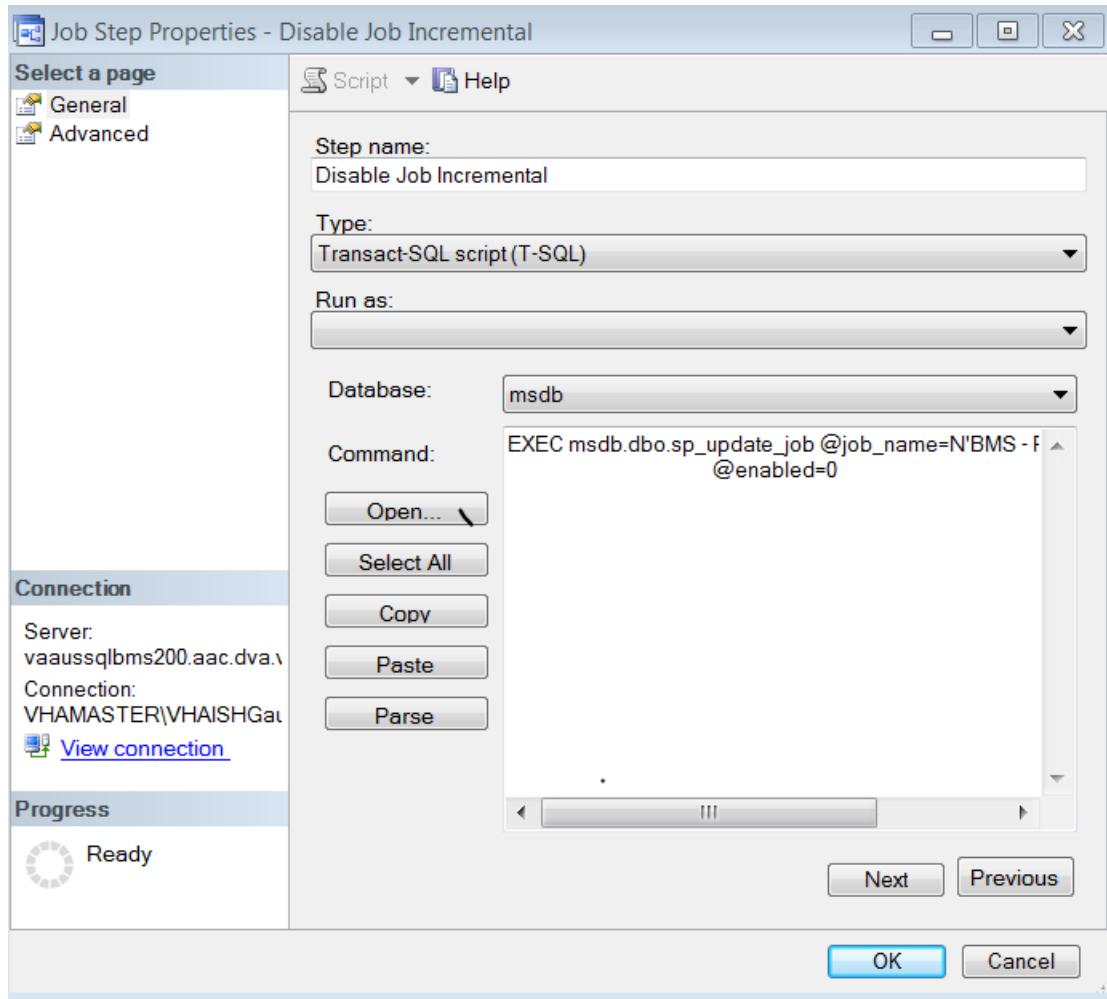


Figure 6-BMS-Check State Job Incremental

Step 5. Call stored procedure `sp_infoworld_pachet_full_BMS_AUTHZ`:

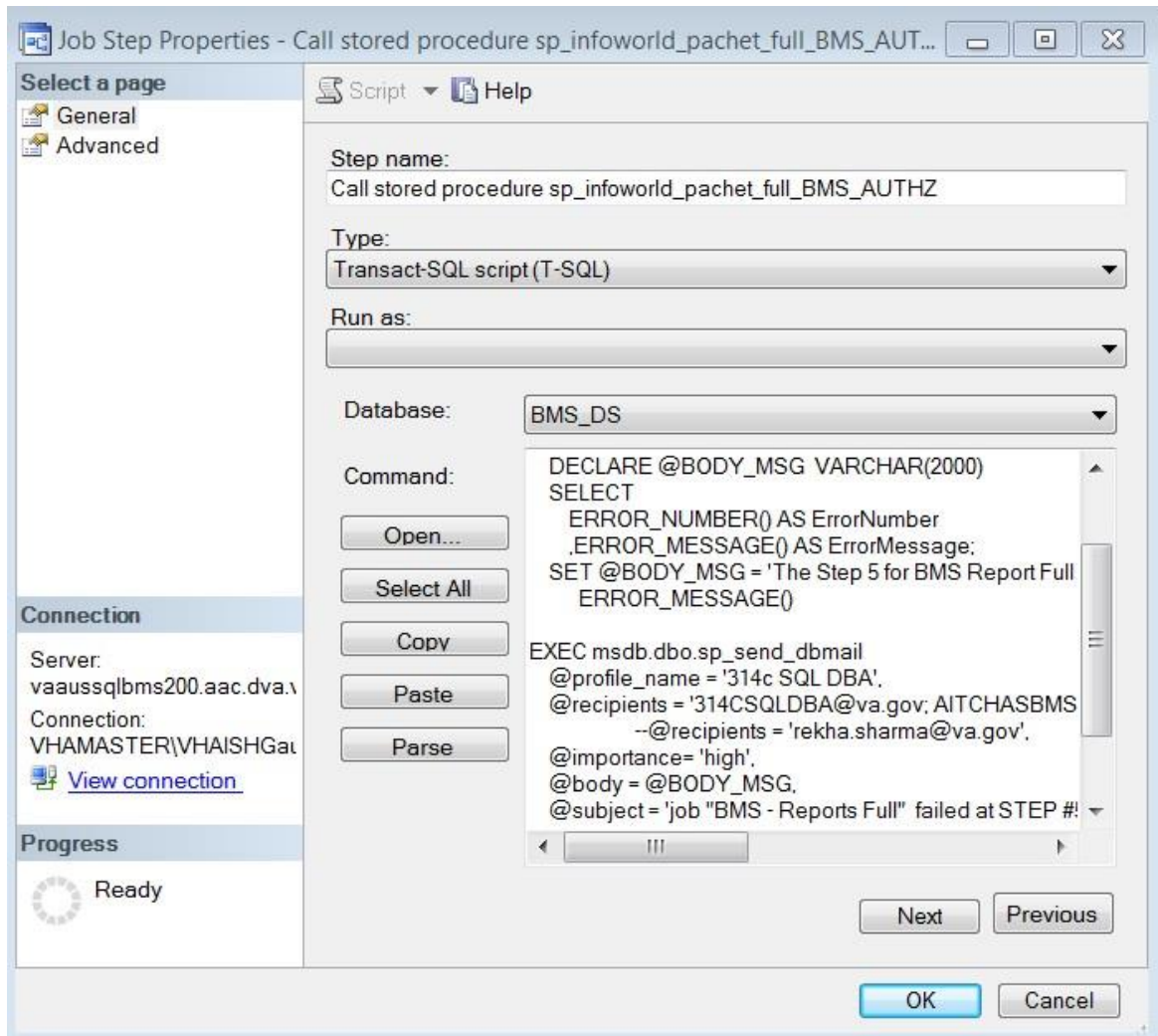


Figure 7-BMS-Job Step Properties

Step 6. Call stored procedure sp_infoworld_pachet_full_BMS

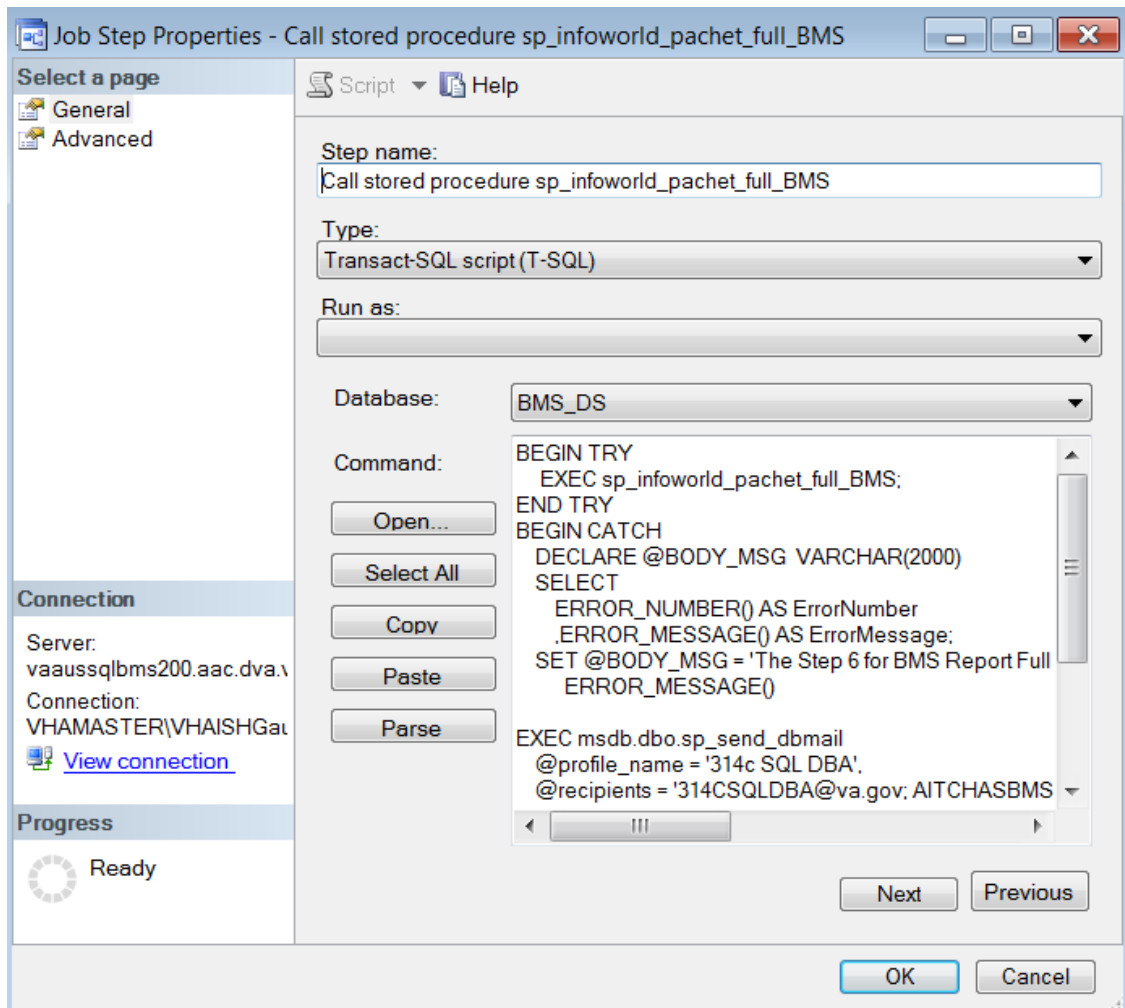


Figure 8- BMS- Job Step Properties-Call Stored Procedure

Step 7. Call stored procedure sp_infoworld_pachet_full_BMS_EIS

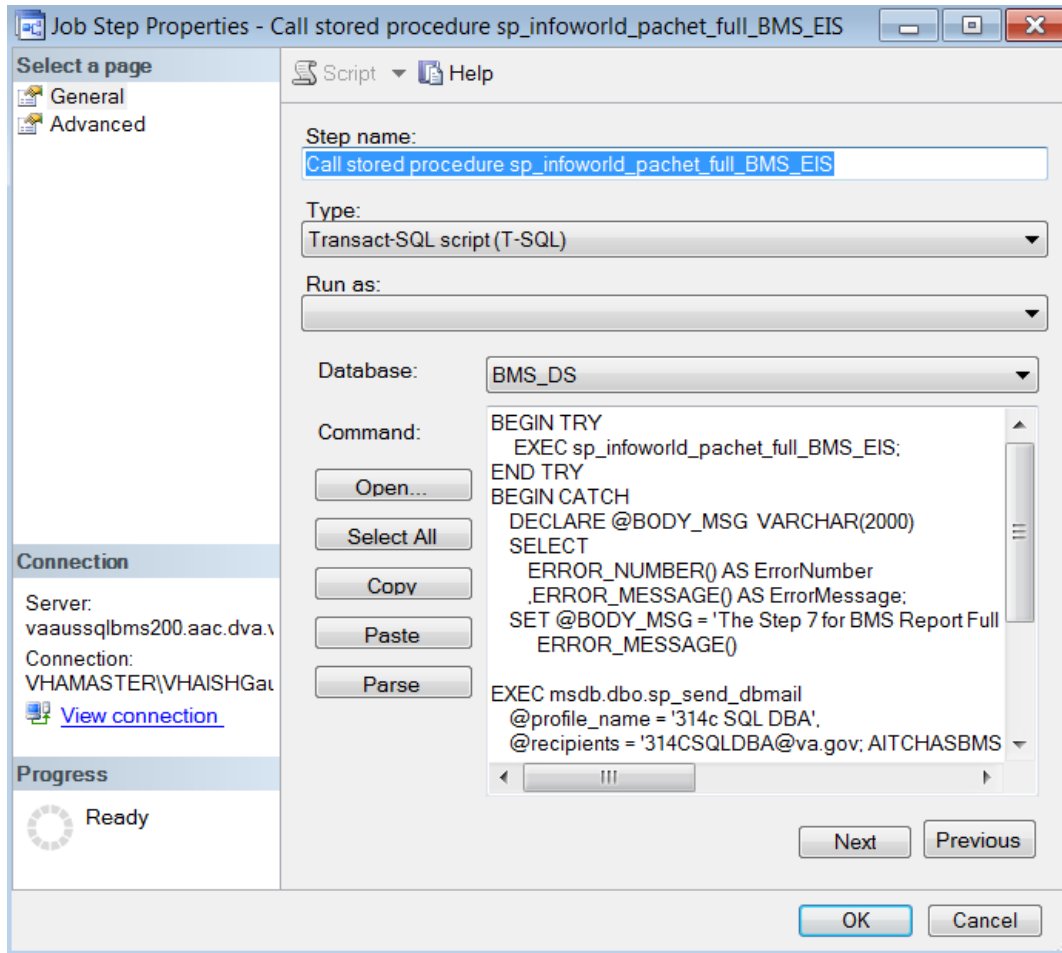


Figure 9- BMS-Job Step Properties-Call Stored Procedure_SP_Infoworld

Step 8. Call stored procedure sp_infoworld_pachet_full_BMS_EVS

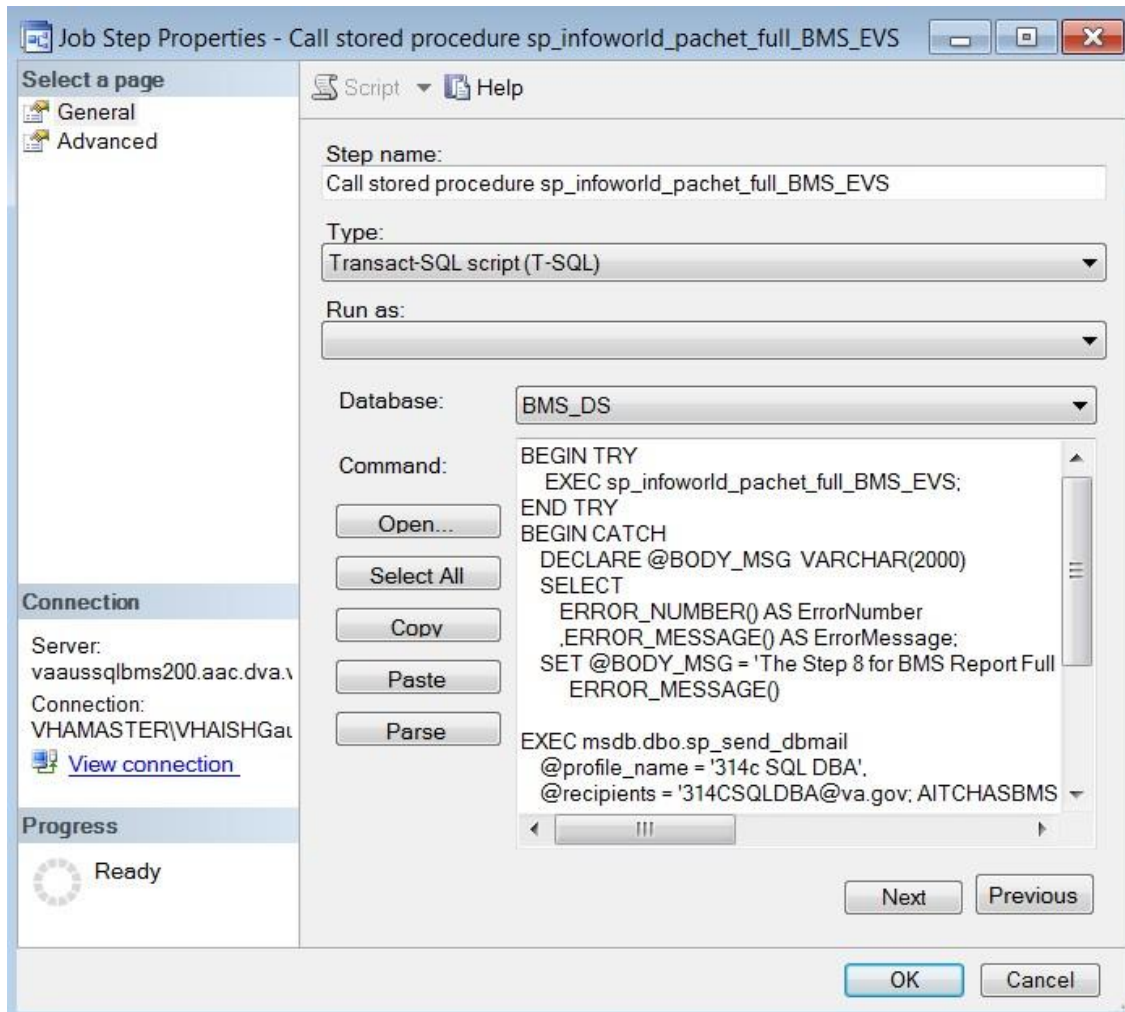


Figure 10-BMS-Job Step Properties_BMS EVS

Step 9. Clear/Load DW Data, call usp_ETL_ProcessFull_VOCAB

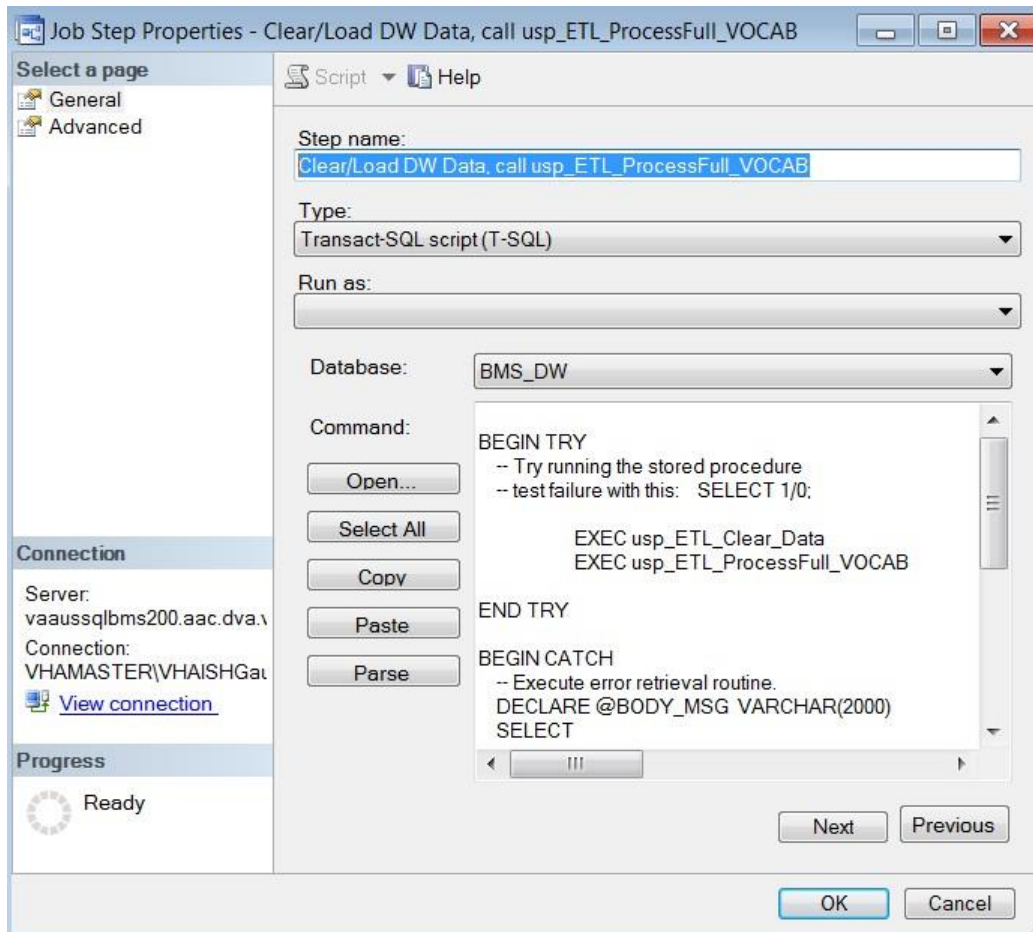


Figure 11-BMS- Job Step Procedures-VOCAB

Step 10. Call stored procedure usp_ETL_ProcessFull_FACTS

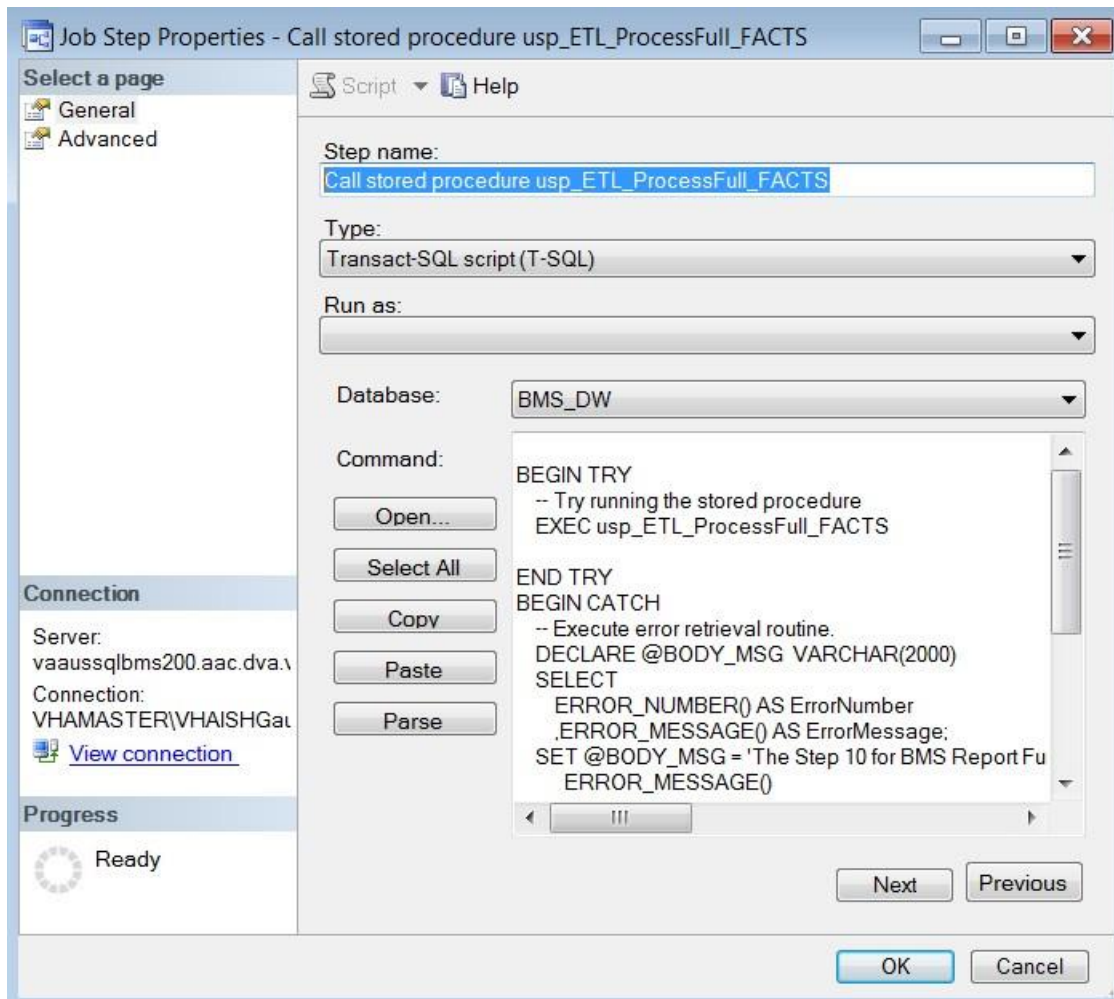


Figure 12-BMS-Job Step Procedures-ETL_Processfull_Facts

Step 11. Copy users in history database

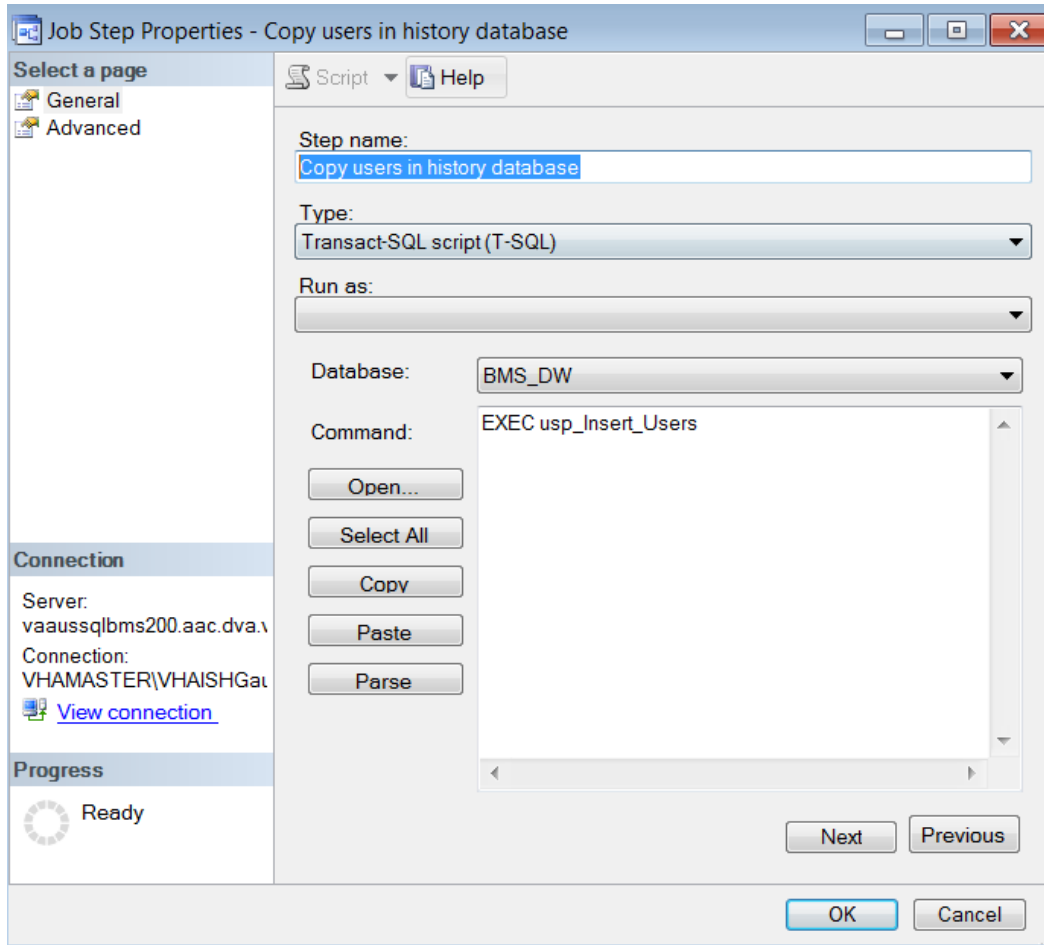


Figure 13- BMS- Copy User in history database

Step 12. Clear DS data

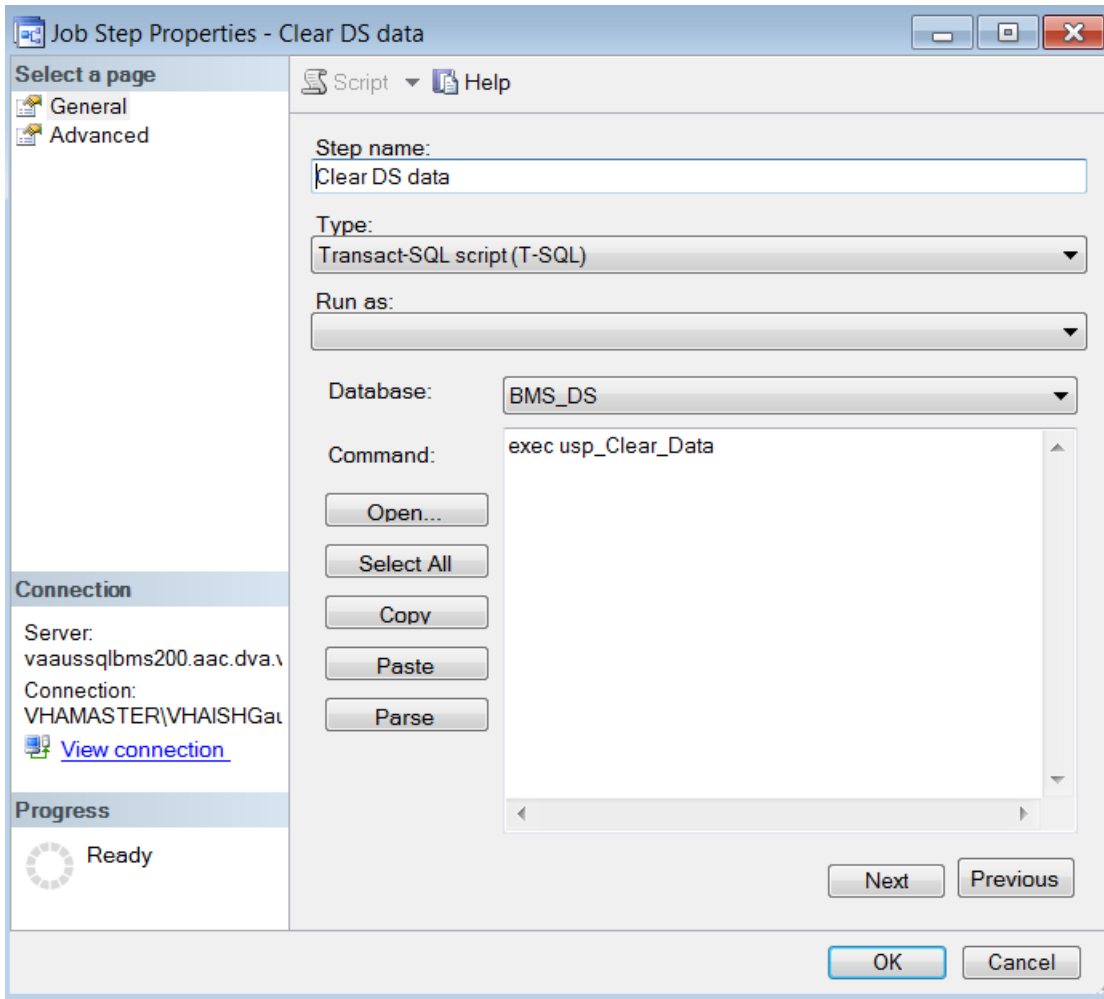


Figure 14- Clear DS data

Step 13. On Success Re-enable Incremental

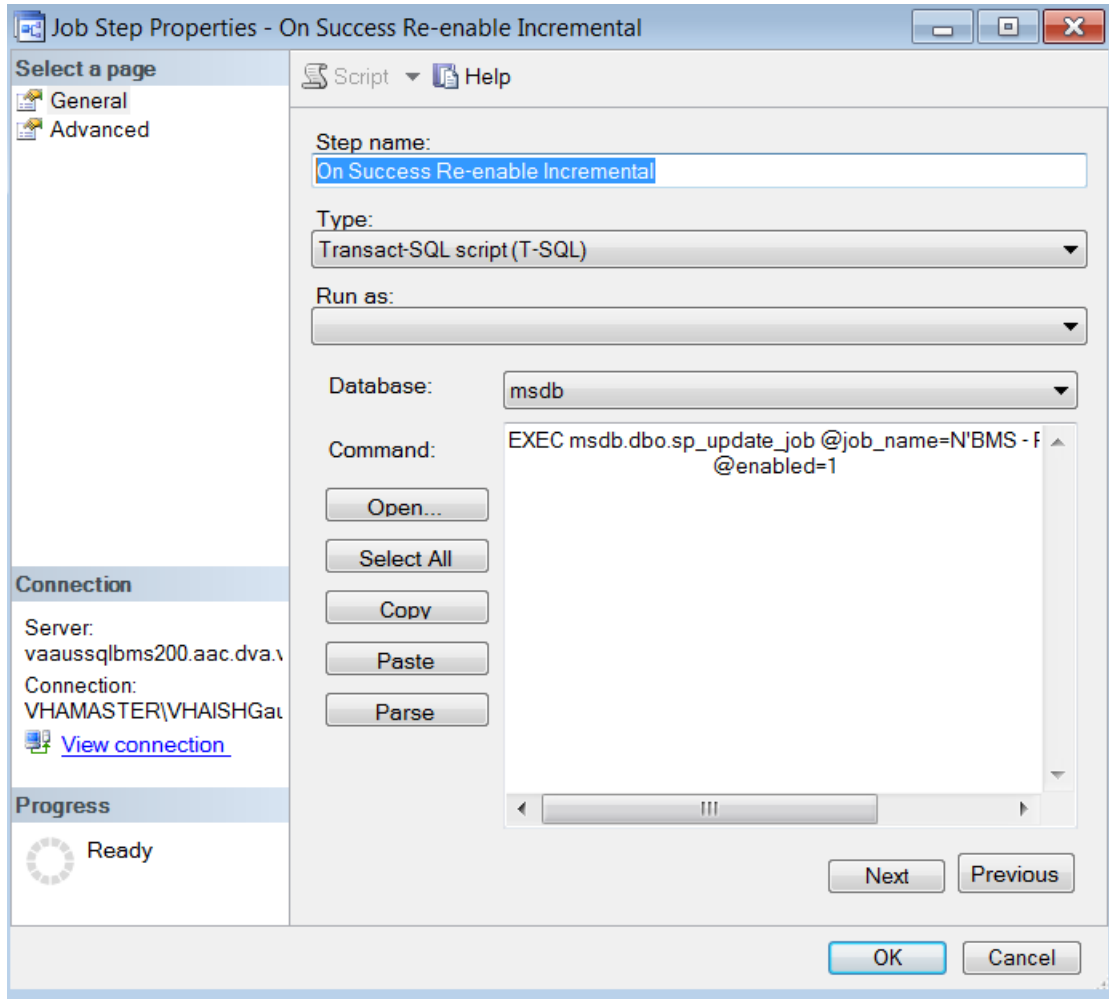


Figure 15-BMS-Re-enable Incremental

Step 14. On Fail Re-enable Incremental

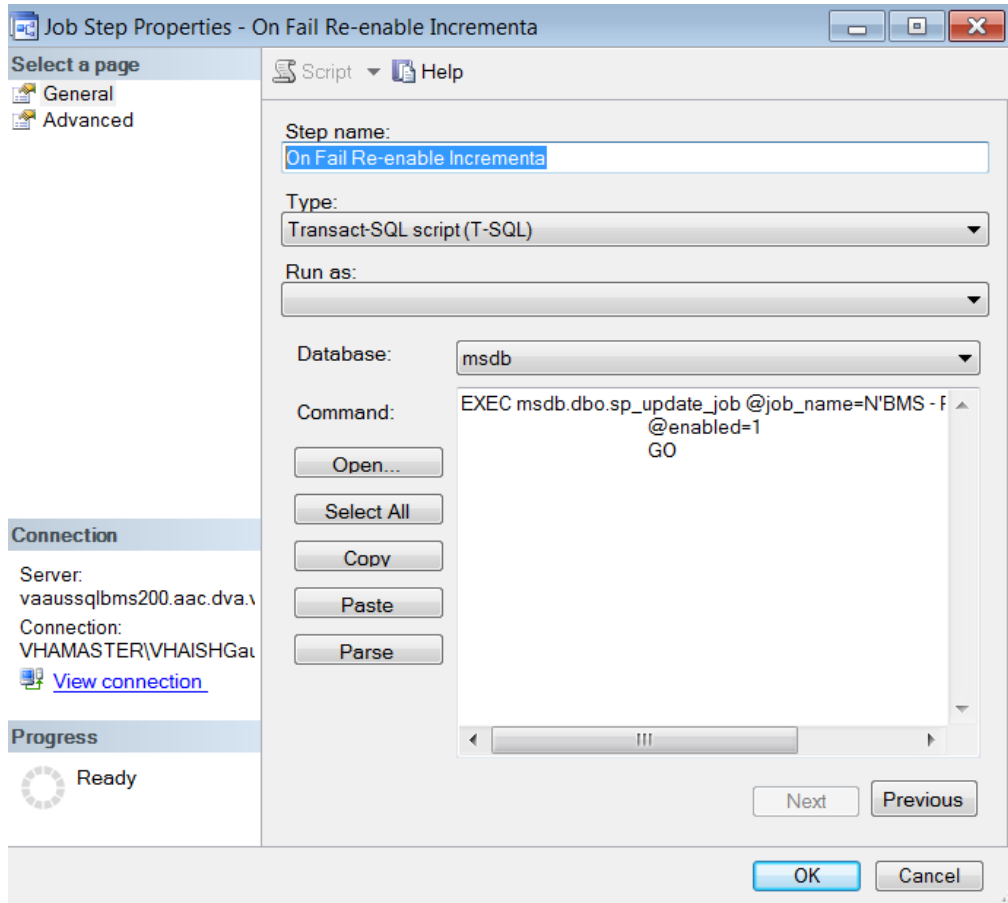


Figure 16-On Fail Re-enable Incremental

Step 15. Shrink BMS_DS: Shrinks the file with the id 2 (the log file, to the size of 1 MB).

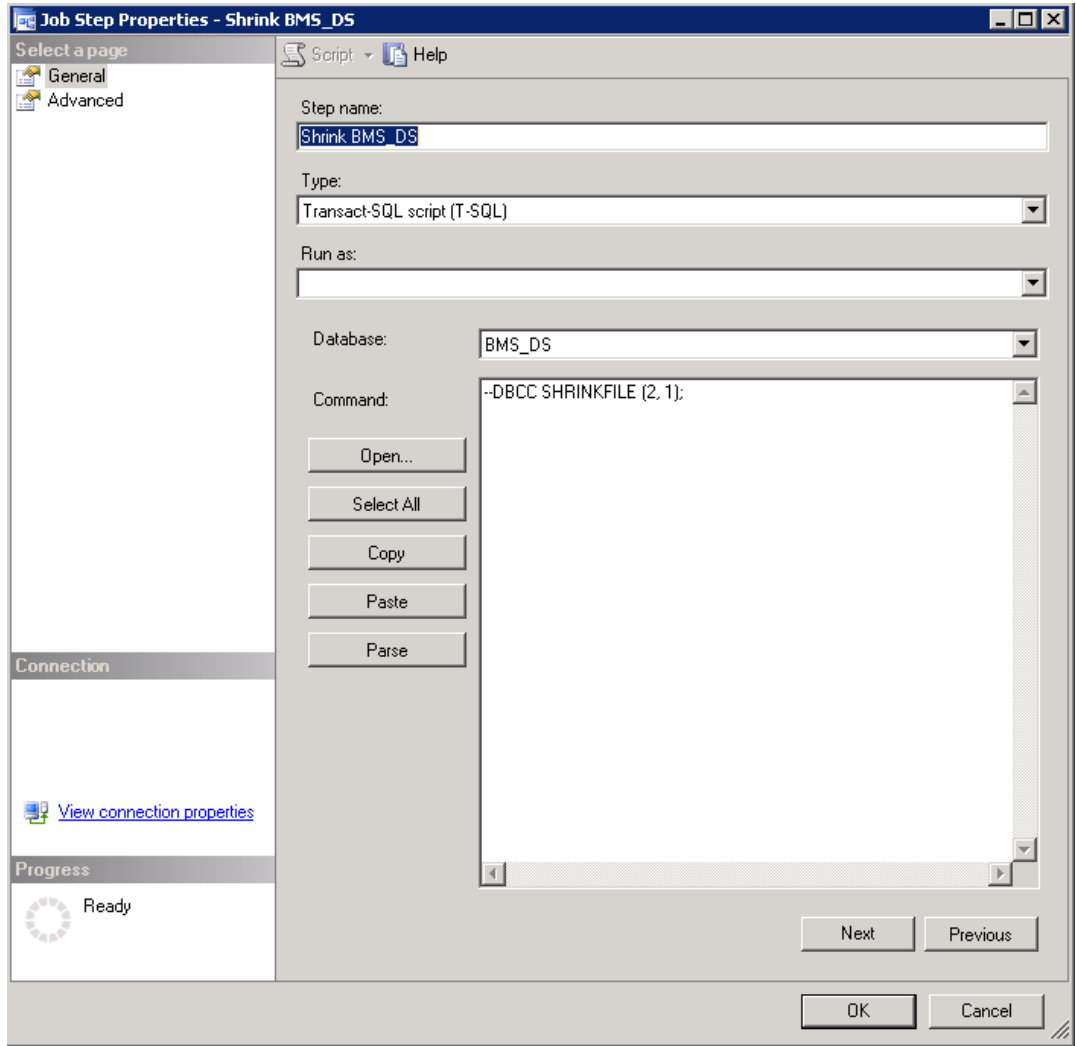


Figure 17-BMS-Shrink

Step 16. Clear data from BMS_DW: the data warehouse database is cleared, meaning that its tables will become empty, but of course exceptions can exist and they really do - tables that contain static data and should not be removed. Thus, the database becomes ready to receive all the source data.

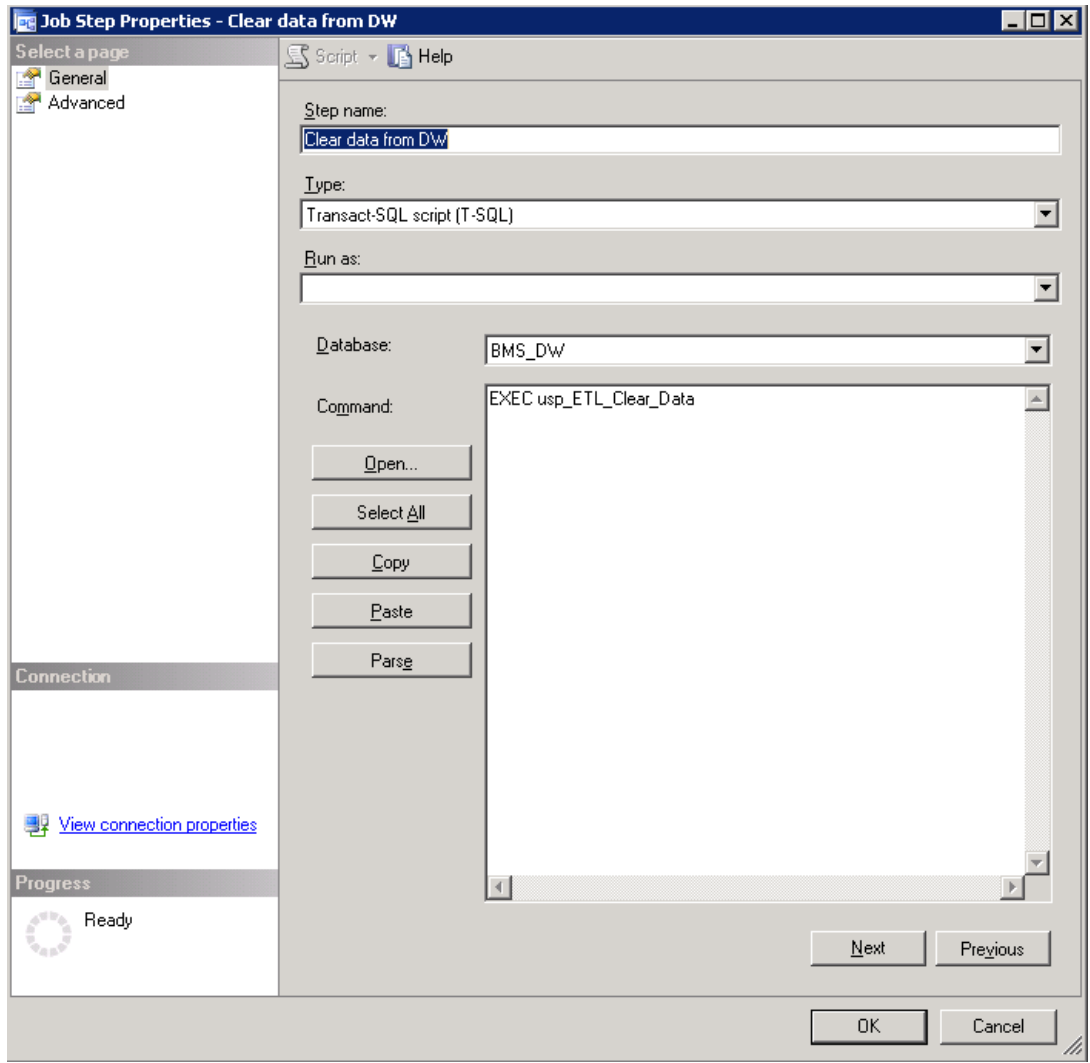


Figure 18-BMS-Clear Data

Step 17. Call procedure full on BMS_DW: it inserts first the vocabulary data, then EIS entities (ETL dimension tables) and BMS acts (ETL facts tables).

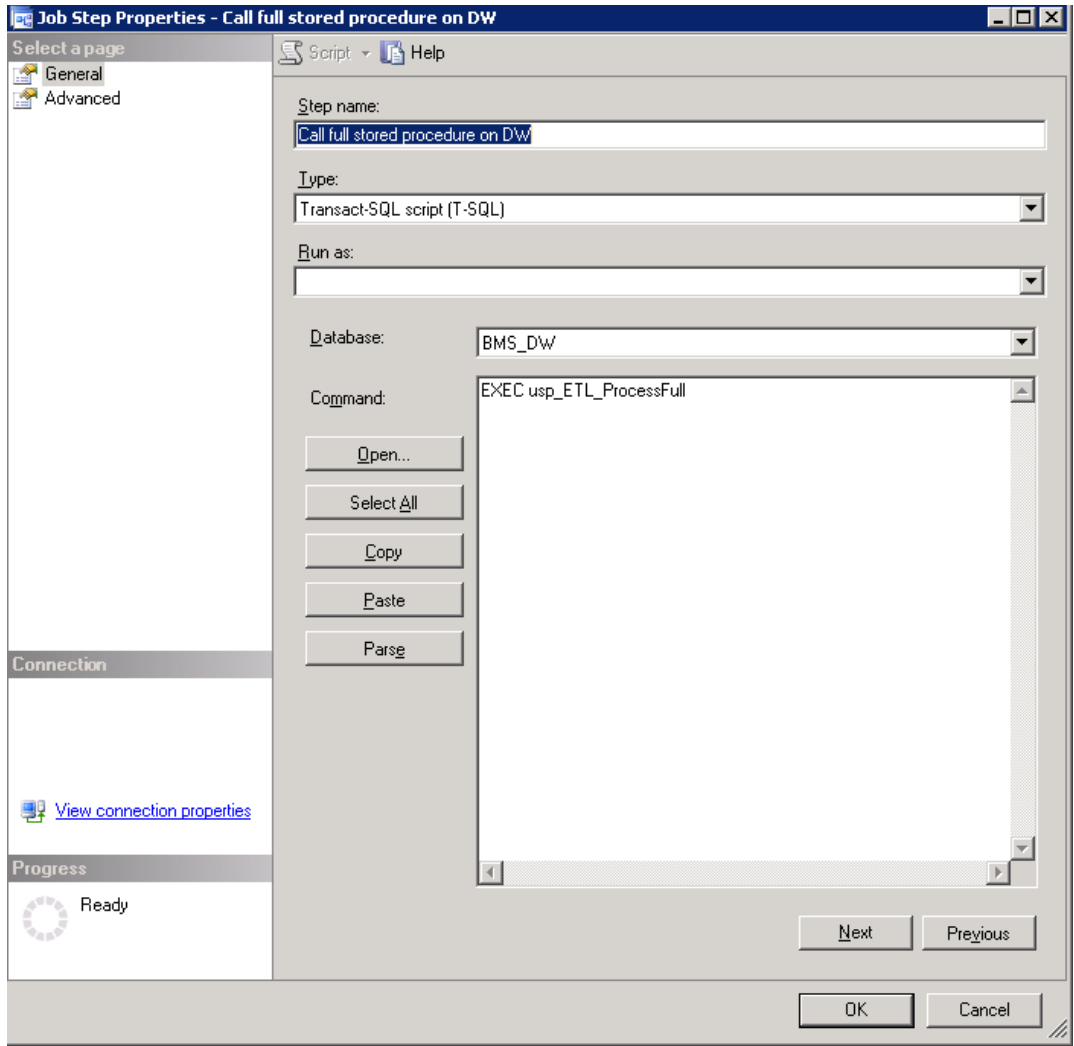


Figure 19- BMS-Call Procedure Full

Step 18. Copy users in history database: adds users in user in the table from BMS History database. This step is needed because some reports need to display users that did certain insert/update/delete operations in the application.

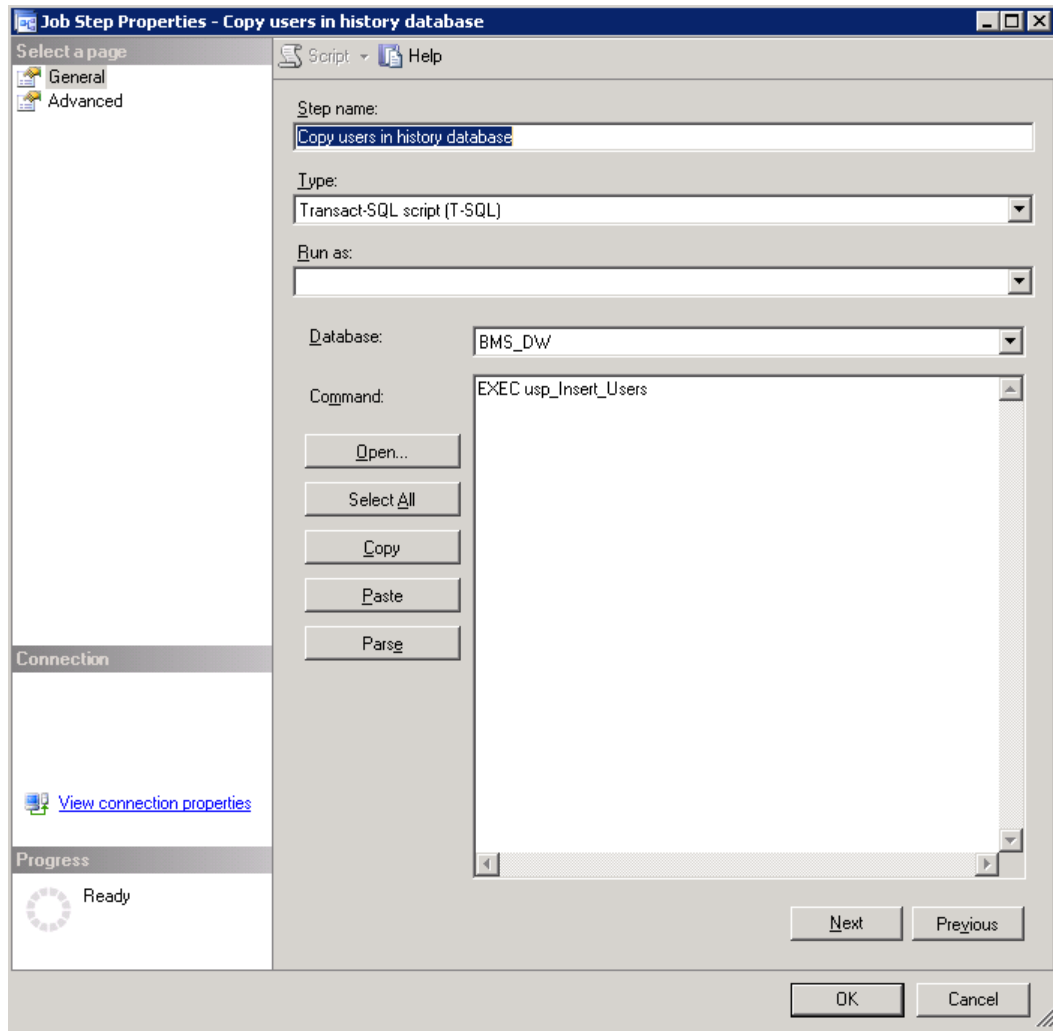


Figure 20- Copy Users in History Database

For each step a log file can be set, see screenshot below for step 7:

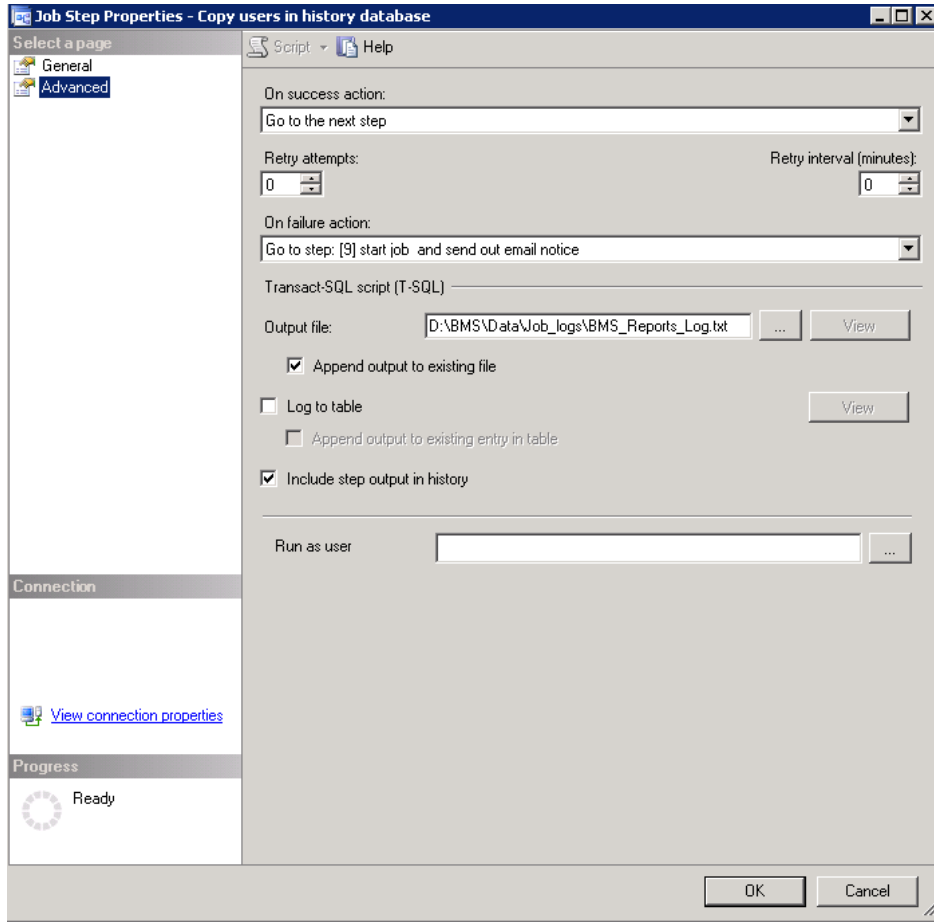


Figure 21-BMS Reports Full Path File Log

The job can be run by right clicking on the job and then choosing “Start job at step...”, selecting the first job in the appearing window and then hitting the Start button. Then a smaller window remains open, showing the progress of the execution and its result: success or failure. The detailed results can be found in the log file that you set at the installation phase. If an operation fails at any step, the job will quit. This setting can be changed in the step’s *Advanced* tab.

Step 19. Clear data from BMS DS database.

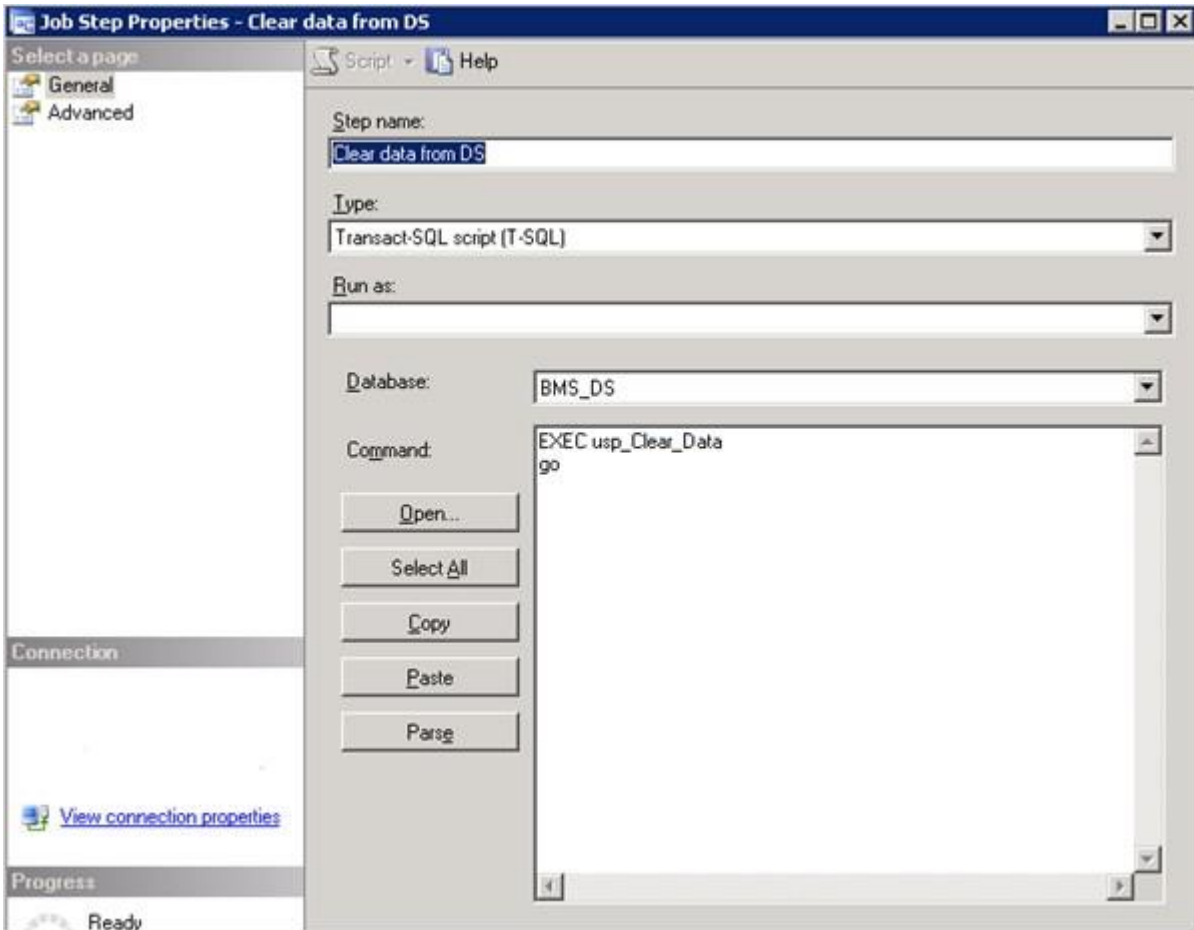


Figure 22- Clear Data from DS

Step 20. This step is only invoked if any of the prior steps of the BMS Report Full job fail. Once invoked, email notification of the failure is sent to the BMS Technical team and BMS Report Full job is restarted.

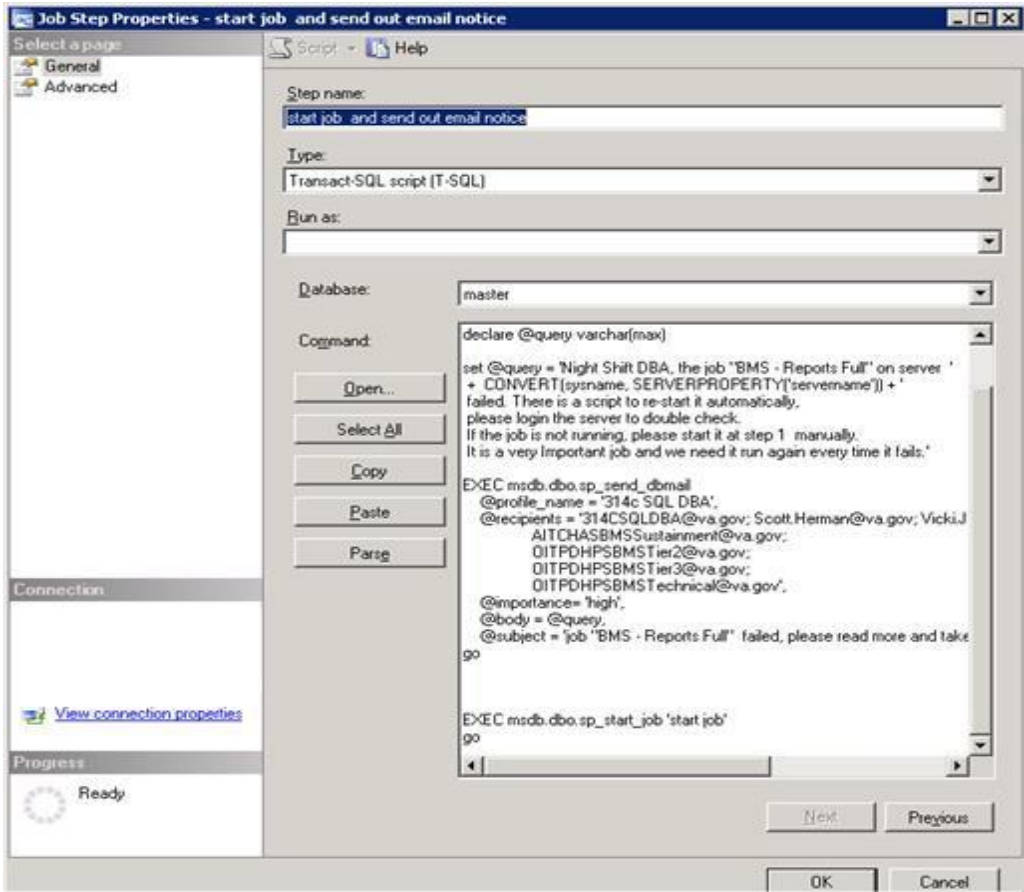


Figure 23-BMS Start Job and Send Email

2.4.2 BMS Incremental

BMS Incremental logic is to keep the BMS_DW database up to date without having to delete all the existing data. The following picture shows the job's steps.

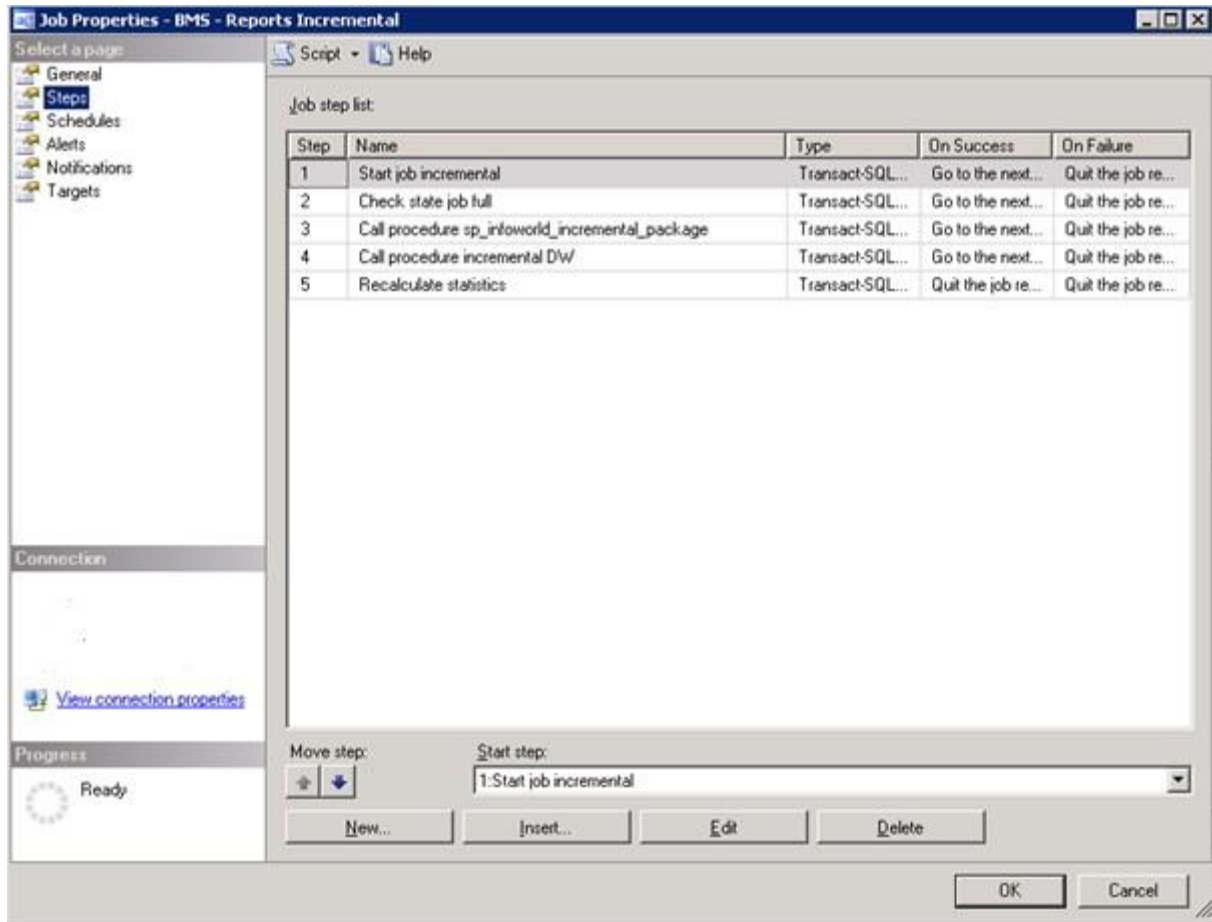


Figure 24- BMS- Report Incremental Job

Step 1. Start job incremental: this is only an informative step for the log file.

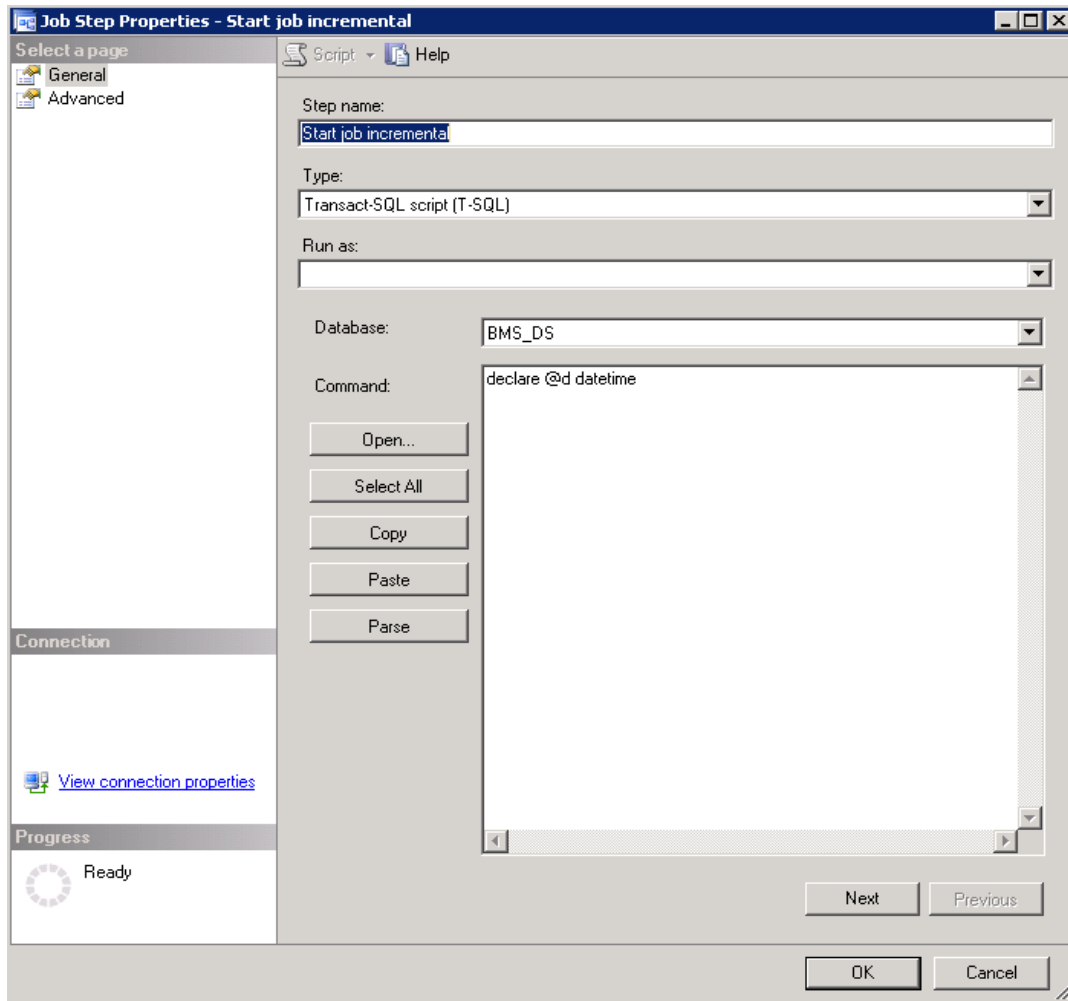


Figure 25-BMS-Start Job Incremental

Step 2. Check state job full: it checks the state of the BMS full job described above in order to be sure that it is not currently running, in which case the incremental job cannot continue.

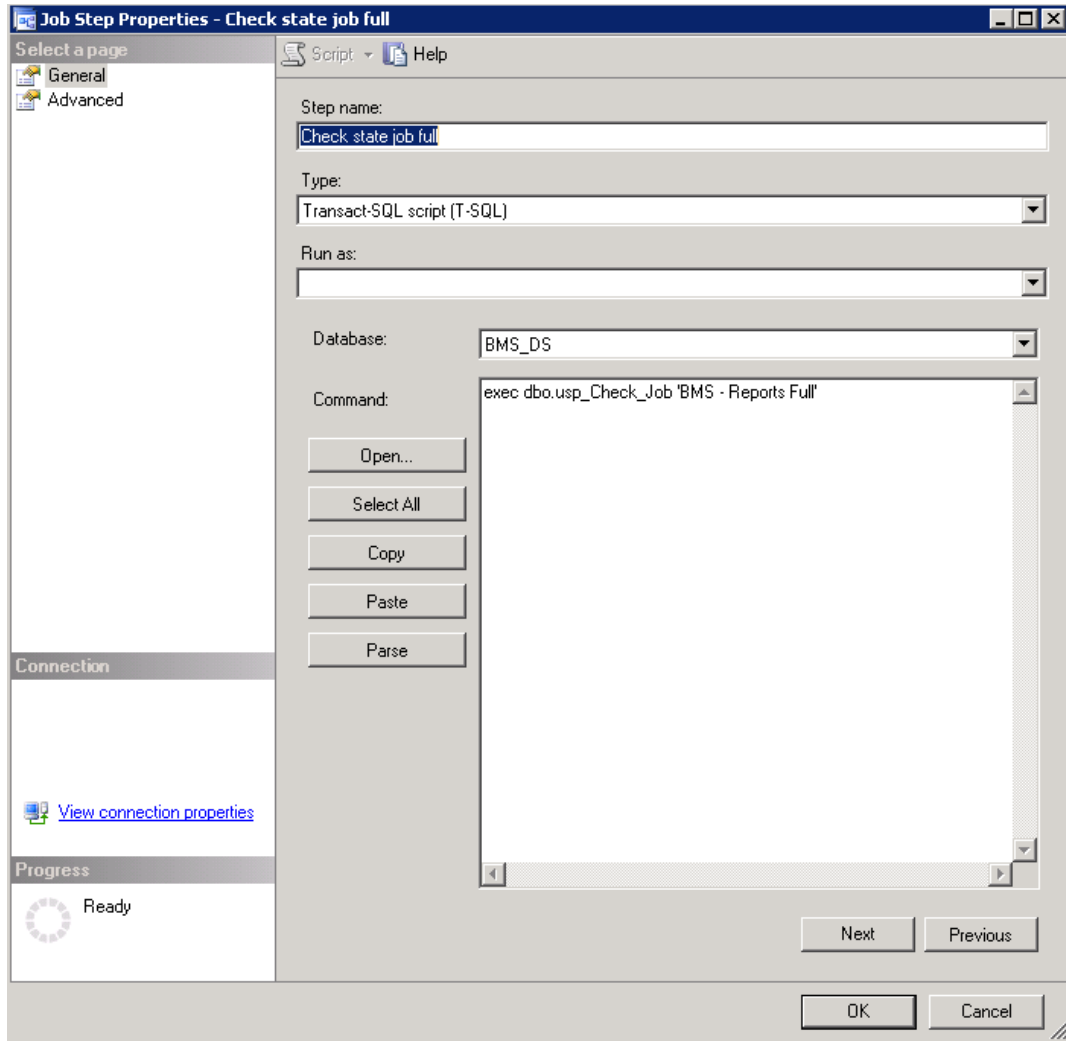


Figure 26-BMS-Check State Job Full

Step 3. Call procedure `sp_infoworld_incremental_package`: makes all the necessary updates from the source databases to the BMS_DS database. When rows are deleted in the source tables, an update is made in BMS_DS database (in the necessary tables) by changing a flag column's value to 1 (deleted) from 0 (existing).

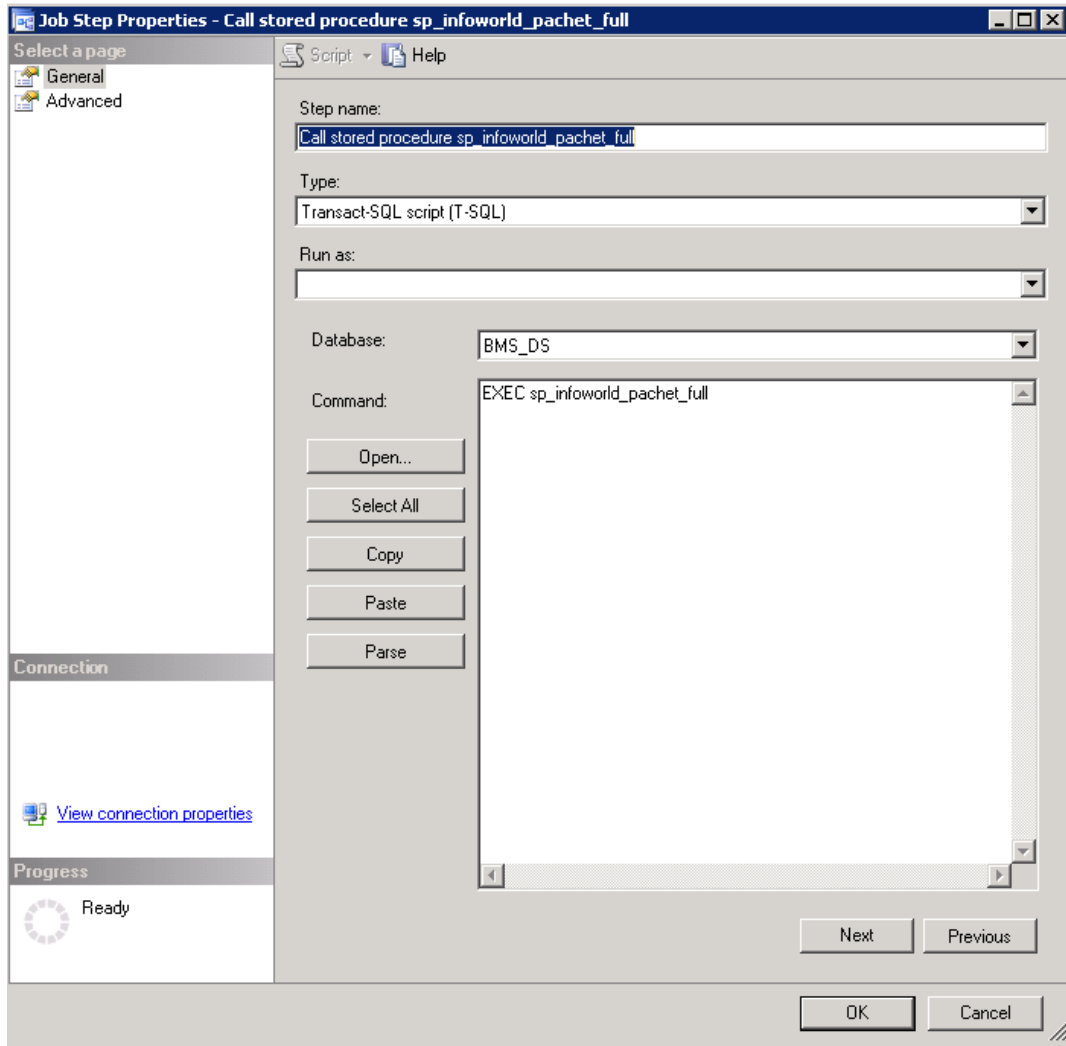


Figure 27-BMS-Call Procedure Properties

Step 4. Call procedure incremental DW: will search for any new, updated or deleted row in BMS_DS database's tables in order to do the correspondent operations in its tables.

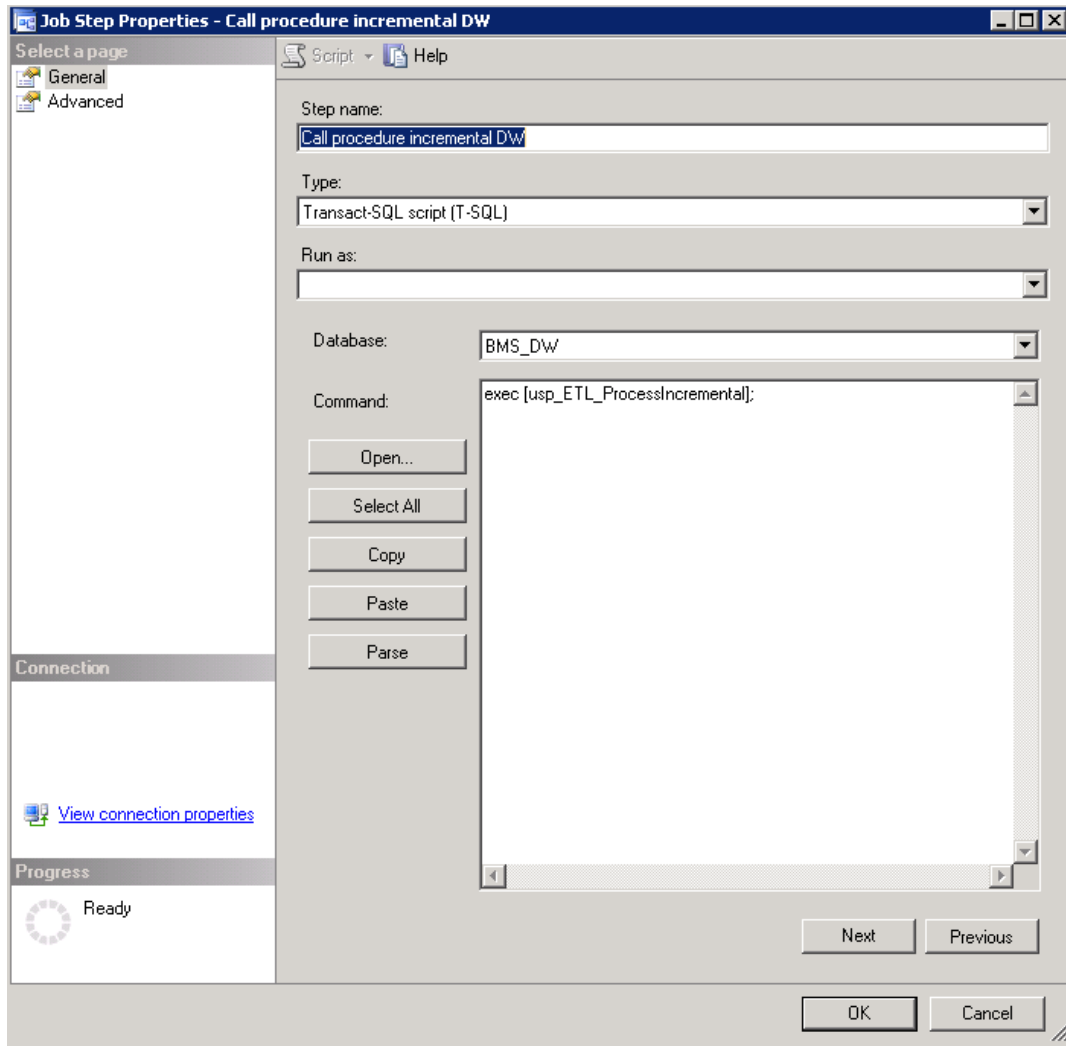


Figure 28-BMS-Call Procedure Incremental

For each step a log file can be set, see screenshot below for step 4:

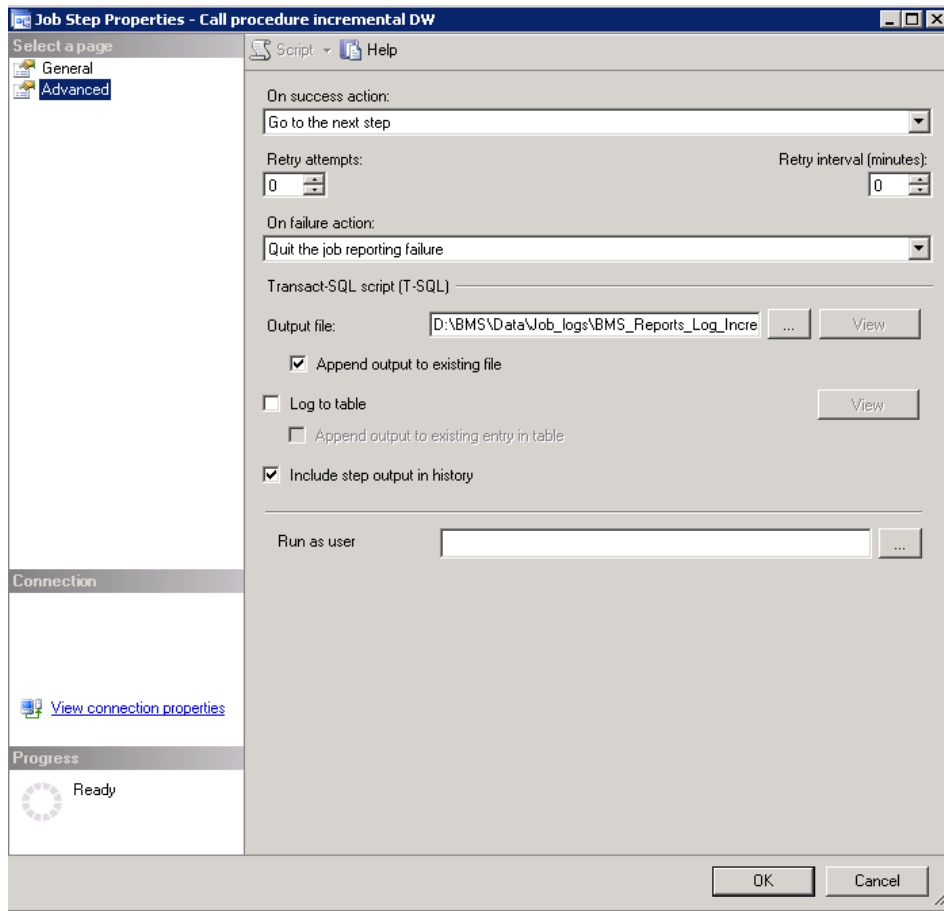


Figure 29- BMS Incremental Path File Log

Step 5. If the duration of the last completed incremental job exceeded 3 minutes, then recalculate statistics to improve query plan execution for the next job run.

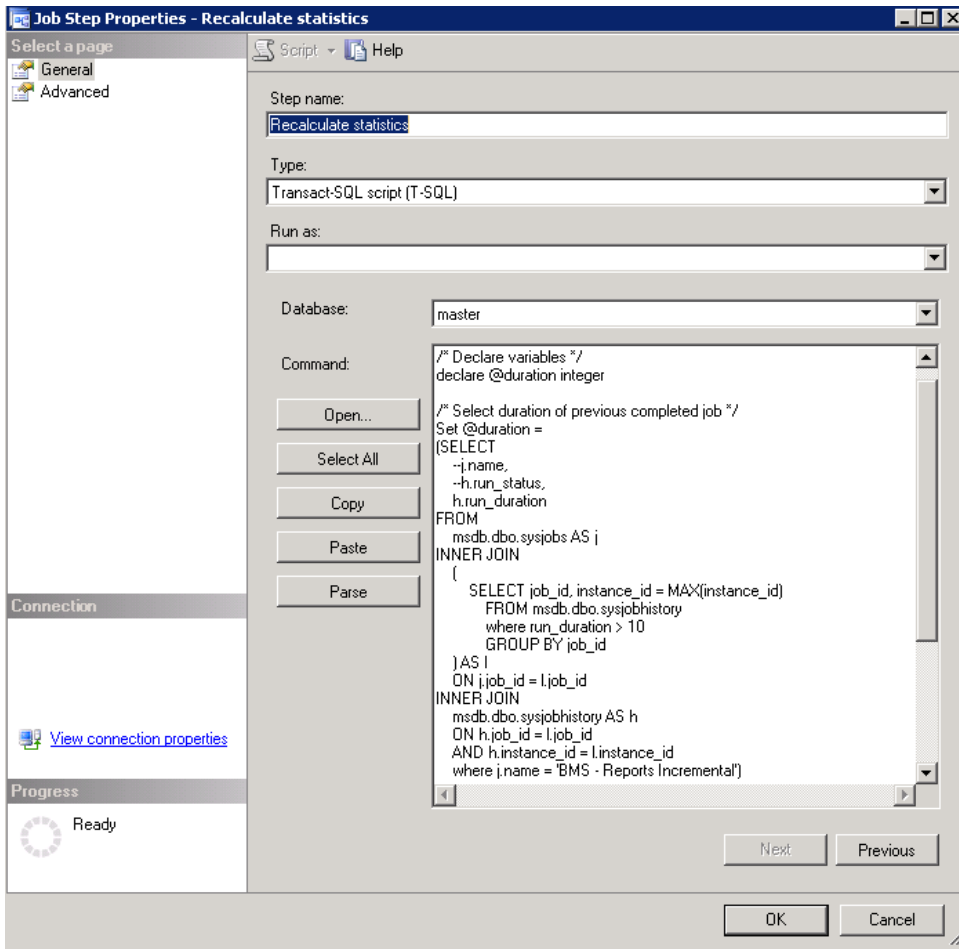


Figure 30- BMS-Call Procedure Recalculate Statistics

2.4.3 BMS Reports Windows Management Instrumentation (WMI)

This job runs a process through Windows Task Scheduler “BMS - Execute WMI_UserGroup” that takes all the users and user groups from the Active Directory and inserts them in BMS_DW database.

In order to run the process successfully, the user needs to configure WMI_UserGroup.config file (Reference Table 12 - WMI User Group Configuration Parameters) and set the connection of the database in the Connections.xml file. These files are stored in the folder where WMI_UserGroup application is installed.

The steps performed by this process include the following:

Below are the steps:

1. Deletes from the following tables from the BMS_DW database:
 dbo.DOMAIN_USER_GROUP
 dbo.DIM_DOMAIN_USER
 dbo.DIM_DOMAIN_GROUP
2. Inserts the domain groups (all) into dbo.DIM_DOMAIN_GROUP table
3. Inserts the users (all) into the dbo.DIM_DOMAIN_USER table
4. Inserts the users group information into the dbo.DOMAIN_USER_GROUP table.

- a. Here it determines who belongs to what group and adds them, since a single user can belong to many groups
- 5. Writes the log messages
- 6. Closes the connections
- 7. Exits

Windows Task Scheduler calls a Batch script D:\BMS\Data\WMI_UserGroup\WMI_Wrapper.BAT. The script sets up some variables for Log Files. The 'Start' time is recorded in a variable then calls the WMI_UserGroup binary file. After the execution of the binary file the 'End' time is recorded. Calculations for the duration are done between the 'Start' and 'End' times, the metrics is sent to Introscope via a batch script which calls a Powershell script to send the Data. If the 'Duration' was less than 8 minutes, the base wrapper script is called again with an additional parameter of "2" added (Second run).

Introscope records the 'Duration' and 'Exit' Results of the binary executable. If the second run also fails to complete with a duration longer than 8 minutes, email alerts are sent via the Introscope rules engine.

2.5 Ward Whiteboard Kiosk Mode Display Configuration (BMS Whiteboard Kiosk Setup)

An electronic kiosk (or computer kiosk) houses a computer terminal designed to function while preventing users from accessing system functions. BMS has adopted the use of electronic kiosks to provide sites with the capability to setup Large Screen Displays for the BMS Ward Whiteboard for greater visibility. The Whiteboard Kiosk is read only access page that presents an overview of the beds in the current facility (or in the selected ward) and allows the user to assess at a glance the bed availability in their facility (or ward). Kiosk mode locks down the user interface to protect applications from accidental or deliberate misuse. These displays should be placed carefully, considering that confidential patient data (Social Security Number) should not be in view of people who are not authorized to see it.

The screenshot shows the 'Whiteboard Home' interface for 'CTX Whiteboard for: T CR - Last Update:'. It displays 'Facility Census' at 18% and 'Total Number Pending/Today's Scheduled Admission: 107/0'. A secondary 'T CR census' is shown at 33%. The main table lists beds with columns for BED, PT, STAFF, ATTENDING, COMMENTS, DISCH STATUS, BED STATUS, WARD, HLMU, and LOS WARD. Three beds are highlighted: CR400-1T, CR400-2T, and CR500-1T in green; CR500-2T in pink; and CR700-1T, CR700-2T, and CR700-3T in blue. Staff assignments include SHALE, JOHN and HINZE, KARLA. Wards listed are 'T CR - GENERAL CWT/TR'. A footer contains links for 'BMS Home', 'Icon Legend', and 'Information'.

| BED | PT | STAFF | ATTENDING | COMMENTS | DISCH STATUS | BED STATUS | WARD | HLMU | LOS WARD |
|----------|----|-------|--------------|----------|--------------|------------|-----------------------|------|----------|
| CR400-1T | | | | | | | | | |
| CR400-2T | | | | | | | | | |
| CR400-3T | | | | | | | | | |
| CR500-1T | | | | | | | | | |
| CR500-2T | | | | | | | | | |
| CR500-3T | | | SHALE, JOHN | | | | T CR - GENERAL CWT/TR | 🟡 | 17:04 |
| CR700-1T | | | | | | | | | |
| CR700-2T | | | HINZE, KARLA | | | | T CR - GENERAL CWT/TR | 🟡 | 23:04 |
| CR700-3T | | | SHALE, JOHN | | | | T CR - GENERAL CWT/TR | 🟡 | 21:04 |

Figure 31- BMS Ward Whiteboard Screen

Setting up for the BMS Whiteboard Kiosk involves a series of steps that most often are performed by IT staff with access to Local Site network configuration and/or staff with authority to request the required Local Site and Active Directory (AD) network configuration changes.

Steps for configuring the BMS Whiteboard Kiosk can be divided into three major categories:

- The Ward Whiteboard Kiosk URL
- The Network User for BMS Kiosk Access
- The Kiosk Workstation for Local Site Use

Each category involves a series of required steps to ensure successful operation of the Kiosk. Following is an outline of the process to setup and configure the BMS Whiteboard Kiosk for a local site.

- 1) *Create the Ward Whiteboard Kiosk URL. See details in **2.5.1 Create the Ward Whiteboard Kiosk URL***
 - a) Determine the BMS Whiteboard Parameters for Kiosk Operation and Setup
 - b) Test the URL in a browser

- 2) *Set up a default user for the kiosk. See details in **2.5.2 Set up a default user for the BMS Kiosk***
 - a) Set up the Network User for BMS Access
 - b) Configure the Whiteboard Kiosk Default Login User in BMS
 - c) Assign a Role to the Whiteboard Kiosk Default User in BMS

- 3) *Set up the Workstation / Kiosk Machine. See details in **2.5.3 Set up the Workstation / Kiosk Machine***
 - a) Disable the Screen Saver
 - b) Configure the Power Settings to Disable Sleep and Stand by Mode
 - c) Configure Auto Log in Option and stop MS Lync from opening upon start up
 - d) Set the URL as the Home Page in IE
 - e) Add <https://REDACTED.va.gov> to “Trusted Sites” in IE
 - f) Add to the start-up commands (Windows) the launch of the browser
 - g) Close IE, and restart to test
 - h) Set Registry Keys to configure Kiosk for local Site use

2.5.1 Create the Ward Whiteboard Kiosk URL

The Ward Whiteboard display uses parameters to determine the behavior of the display. For example, the whiteboard can display a specific ward or ALL wards for a site by setting the parameter **wardName**. Below is a description for each whiteboard display parameter along with available options for each.

| Parameter | Short Description | Options |
|-----------------------|--|--|
| facilityCode | Code of facility (e.g., BROCKTON = BRK). | Enter the 3 character facility ID. |
| wardName | Name of BMS Ward Name. To see all the wards the value that needs to be configured is ALL. | These are the BMS WARDS as defined in the Facility, Site Options, VistA Ward Add/Edit. The Ward name value should match the "BMS WARD GROUP TEXT". A single ward can be entered or the value "ALL" to display all the wards at the facility. |
| splitScreen | To split the page in two tables enters the value "Yes". | Yes No |
| displayPTCode | How the patient should be displayed under the column "Patient" (full name or 1st+Last 4) or LastName. LastName is required for Kiosk mode due to Privacy regulations. | FirstAndLast4 LastName |
| genderColorCode | To change the background color for the row according with patient's gender. | Blue/Pink None |
| displayFooterCensus | To view the footer census. | Yes No |
| displayStaffAttending | What column is displayed in the table? (Staff column, Attending column or both). | Staff and Attending Staff Attending |
| scrollRate | The timer interval will affect the scrolling speed. This parameter can be absent. (If specified then it represents seconds). | Null or an integer value. |

Table 15-Ward Whiteboard URL Configuration Parameters

2.5.1.1 Determine the parameters for the Kiosk, and create the URL

Sample URL to display All Wards for site BRK:

<https://REDACTED.va.gov/WardWhiteboardUrl?facilityCode=BRK&wardName=ALL&splitScreen=No&displayPTCode=LastName&genderColorCode=Blue/Pink&displayFooterCensus=Yes&displayStaffAttending=Staff%20and%20Attending&scrollRate=20>

2.5.1.2 Test the URL

Once you have the URL, type it into a browser to test. The BMS Ward Whiteboard should come up. Note: a site can have a different URL for each kiosk.

2.5.2 Set up a default user for the BMS Kiosk

Create a network service account for accessing the BMS page. Make sure that it is in an Organizational Unit (OU) that will not get the Enterprise System Engineering (ESE) Federal Desktop Core Configuration (FDCC) / US Government Configuration Baseline (USGCB) User Settings. Set the “Log on to” so the account can only log onto the kiosk PC you are setting up.

2.5.2.1 Set up the Network User for BMS Access

- Create AD User with non-expiring password under Service Accounts for the local site. If you are not an AD administrator then provide the following instruction to the AD along with your request for a new service account.

In Active Directory Create a Generic User with a Non-Expiring password in Service Accounts for your location with Access to All Computers.

NOTE: You will create a single ID, not one for every PC. Also, do not setup auto login with this generic account at this point as PCs will automatically lock at this level.

- Right click the “Service Accounts” folder (VXX.med.va.gov/VISNxx/Facility(XXX)/Service Accounts) and select New...User.
NOTE: Do not use the “Service Accounts” folder directly under vXX.med.va.gov. Under First Name, enter vhaXXX_____ (such as vhaSTLBMSUser)
- Enter the same under “User Login Name”
- Enter a password when prompted and select
- Uncheck “User must change password at next logon”
- Check “Password never expires”
- Click “OK” at the warning that the user will not be prompted to change the password.
- Click “Next”
- At the top of the screen the path should read, “vXX.med.va.gov/VISNxx/Facility(XXX)/Service Accounts”
- Uncheck “Create an Exchange Mailbox”
- Click “Next”
- Review confirmation screen for accuracy and click “Finish”.
- Your new account should be available in your “Service Accounts” list. You may have to refresh your list to see it.
- Double-click your new account, in the description field, add
- SERVICE ACCOUNT: VHAxxxxxxx(YourUserName): BMS DISPLAY
- In the Account tab, ensure “This user can log on to “All computers”. Do not identify any specific computers.
- When you are finished, your new account in the Service Accounts list should only show a Name, Type, and Description. All other fields should be blank.

2.5.2.2 Configure the Whiteboard Kiosk Default Login User in BMS

For the current facility that will display the associated Whiteboard page, a default user needs to be configured in BMS application for the Ward Whiteboard Kiosk.

To configure the Whiteboard Kiosk Default User:

- **Go to the BMS Site Home Page**

- **Click on the Site Options link**
- **Click on the Facility Setting link**
- **Fill the fields “Whiteboard Kiosk Default User Name:”, “Whiteboard Kiosk Password:” and “Whiteboard Kiosk Password Confirm:” with the BMS Service Account ID**

Figure 32-Facility Settings

- **Click Submit**

2.5.2.3 Assign a Role to the Whiteboard Kiosk Default User in BMS

Each facility must assign the BMS “EMS USER” Role to the Service Account ID created to run the Whiteboard Kiosk URL. This assignment can be done from the **BMS Admin Section** ➤ **Add/Edit BMS User** hyperlink or Facility **Site Options** ➤ **BMS User Add/Edit** hyperlink.

- **Click the *Select Existing NT User Name* button**
- **Select the correct VISN Domain from the left Drop Down Box.**
- **In the User Name box Enter the BMS Service Account ID created for the BMS EMS/Whiteboard Kiosk. Then click the Find button**
- **Click the Selected Radio button for the user. Then click the Select button.**
- **In the EMS User box, select “Yes”. All other roles should be “No”.**
- **In the Default Region box, select the correct Region.**
- **In the Default VISN box, select the correct VISN.**
- **In the Default Site box, select your Site.**
- **In the READ Access box, select “Yes”.**
- **In the WRITE Access box, select “Yes”.**

Admin Menu ADMINISTRATION SECTION - USERADD/EDIT Logout

Select Existing NT User Name Select Default

| PARAMETER | OPTIONS |
|----------------------|--|
| NT User Name | v17.med.va.gov\vphantxbedmgmt |
| Support User? | No |
| National User? | No |
| Regional User? | No |
| VISN User? | No |
| Admin User? | No |
| Audit Log User? | No |
| Site User? | No |
| EMS User? | Yes |
| EMS Supervisor User? | No |
| Guest User? | No |
| Default Region: | 2 |
| Default VISN: | 17 |
| Default Site: | NTX - VA NORTH TEXAS HEALTH CARE SYSTEM: [v] |
| READ Access? | Yes |
| WRITE Access? | Yes |

Display only the facilities with permissions

| READ Access | WRITE Access | Region | VISN | Facility |
|-------------------------------------|-------------------------------------|----------|---------|-------------------|
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Region 2 | VISN 17 | DALLAS (549, NTX) |

Submit Cancel

Figure 33- Whiteboard Kiosk User Role Assignment

- Click Submit

2.5.3 Set up the Workstation / Kiosk Machine

After setting up the workstation / Kiosk machine, it will automatically log in to Windows, and automatically login to BMS.

2.5.3.1 Disable Screen Saver

In order to display the Whiteboard page continuously the screen saver needs to be disabled.

NOTE: The Windows menu that allows the disable of the screen saver might be different from one version of Windows to another. For example, for Windows 7 the needed operations are:

- Right click on the desktop
- Click Personalize

- *Click on the screensaver button on the lower-right part of the page*

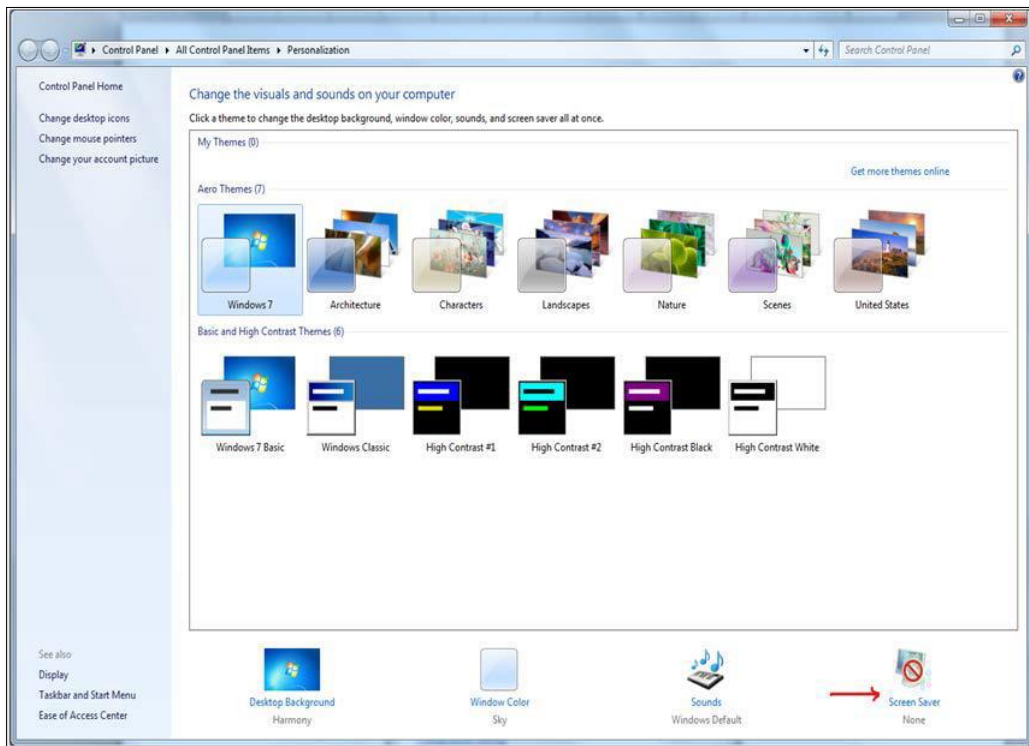


Figure 34- Screen Saver Option

- *Select None from the screensaver drop down on the displayed form*

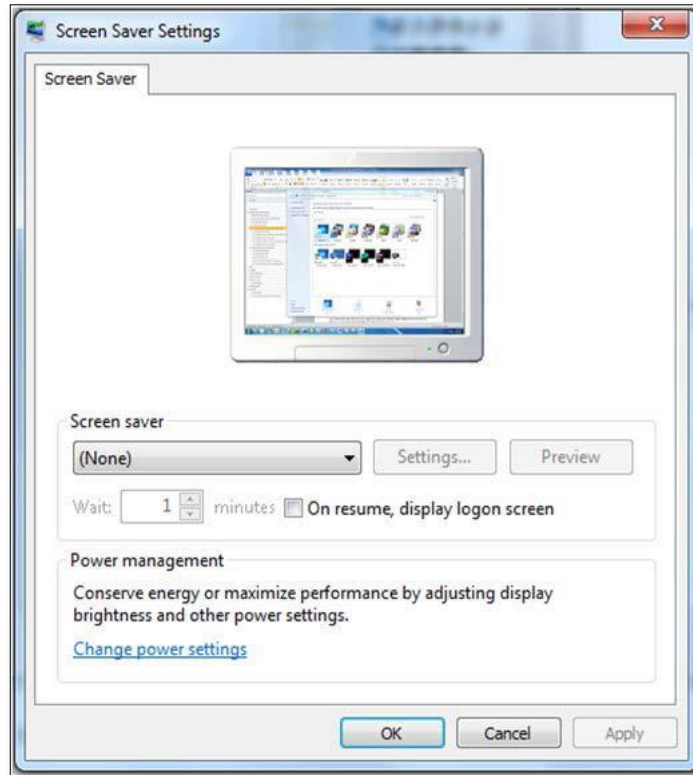


Figure 35- Screen Saver Settings Window

- *Click OK.*

2.5.3.2 Configure Power Settings: Disable Sleep and Stand-by Mode

In order to display the Whiteboard page continuously the power settings need to be adjusted so that the computer will never enter into hibernate or stand-by and also the screen will never turn off.

NOTE: The Windows menu that allows the configuration of the power settings might be different from one version of Windows to another. For example, for Windows 7 the needed operations are:

- *Go To Control Panel*
- *Select Power Options*

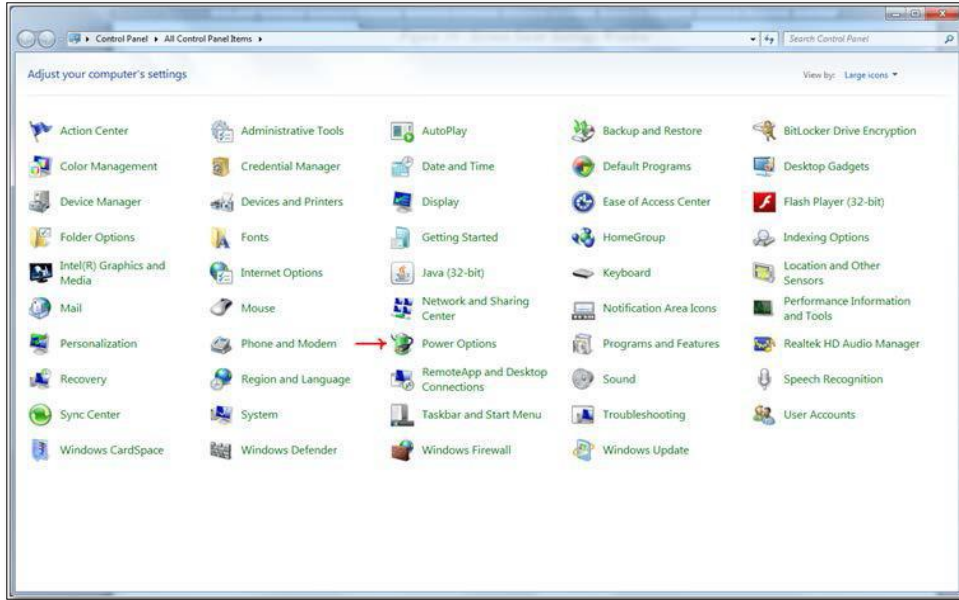


Figure 36- Power Options

- *Click on “Change Plan settings” for the active plan*

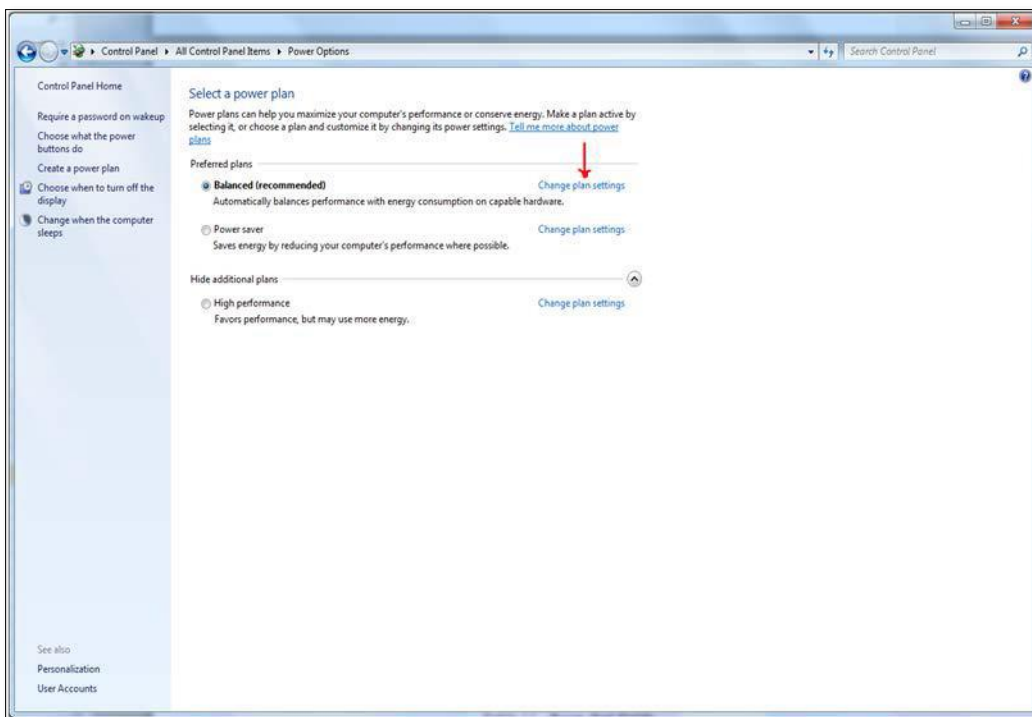


Figure 37- Change Plan Settings Option

- *Select “Never” from the drop downs associated with “Turn off the display” and “Put the computer to sleep”*

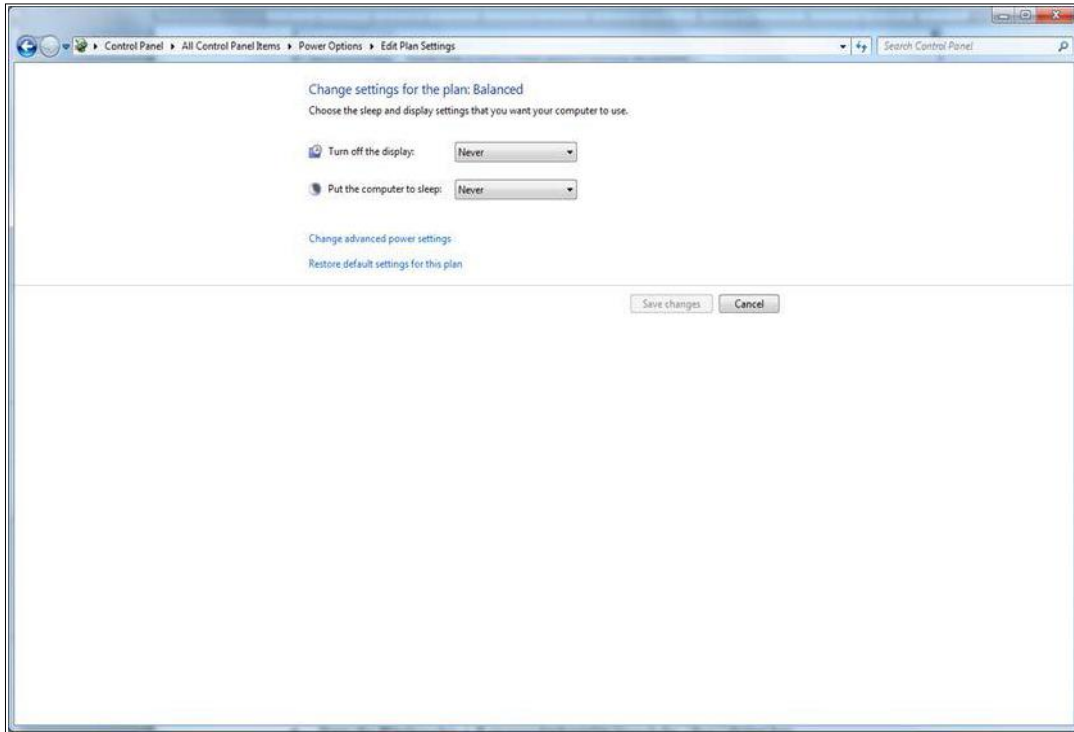


Figure 38- Power Options Settings

- Click "Save changes"

2.5.3.3 Configure Auto-login Option and stop Microsoft Lync from opening upon start up

Configure Auto-Login: The computer that will display the Whiteboard page needs to have the auto-login configuration set to "true".

NOTE: The Windows menu that allows the configuration of the auto-login settings might be different from one version of Windows to another. For example, for Windows 7 the needed operations are:

- Press the Windows key + R on your keyboard to launch the "Run" dialog box.

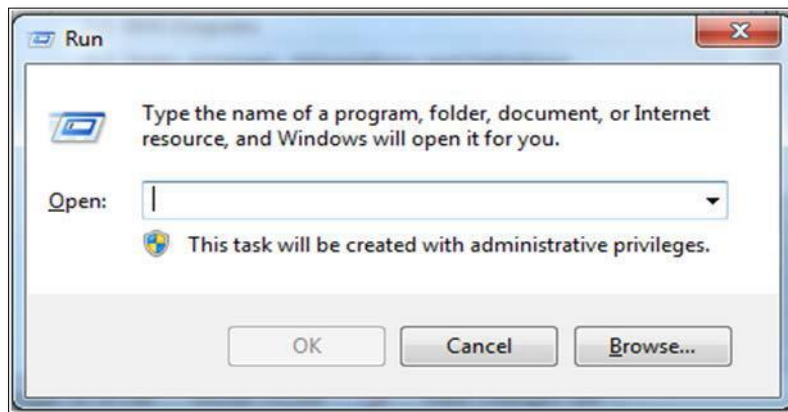


Figure 39- Run Window

- Type in “control userpasswords2”

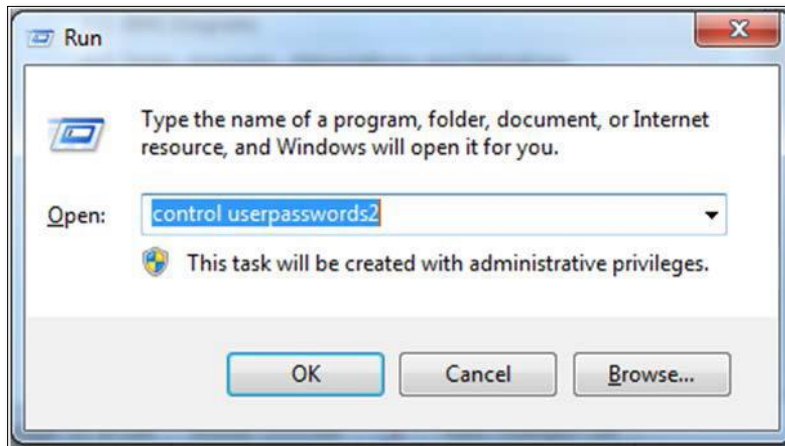


Figure 40- Run Window with Comman Entered

- Press Enter. The User Accounts window will display.

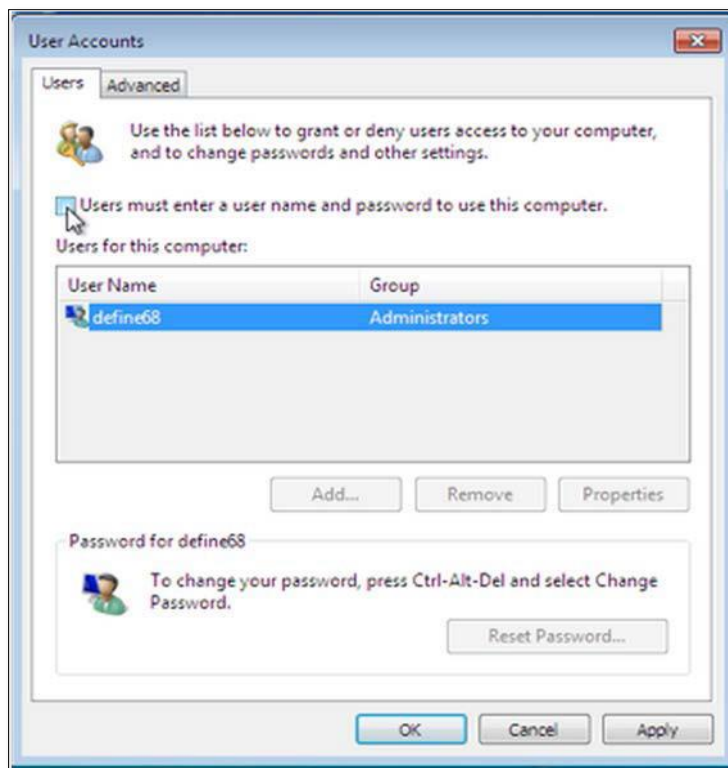


Figure 41- User Accounts Window

- Uncheck the option “Users must enter a user name and password to use this computer” for the BMS Default Kiosk User Account



Figure 42- User Accounts

- *Click “OK”*

Stop Microsoft Lync from opening at startup: **To stop Microsoft Lync from opening at startup follow the steps below**

- *From the Start Menu,*
- *Go to All Programs > Microsoft Lync*
- *Open Microsoft Lync*
- *Go to Tools > Options > Personal*
- *Uncheck “automatically start Lync when I log on to Windows” & “Show Lync in foreground when it starts”.*

2.5.3.4 Set the URL (from step 2.5.1) as the Home Page in Internet Explorer

The specific Ward Whiteboard Kiosk URL needs to be configured as the Home-Page for the intended browser. The menu to set the default home-page might differ from one browser to another.

For example, for Internet Explorer (IE) 9.0 the user needs to:

- **Select Tools menu**

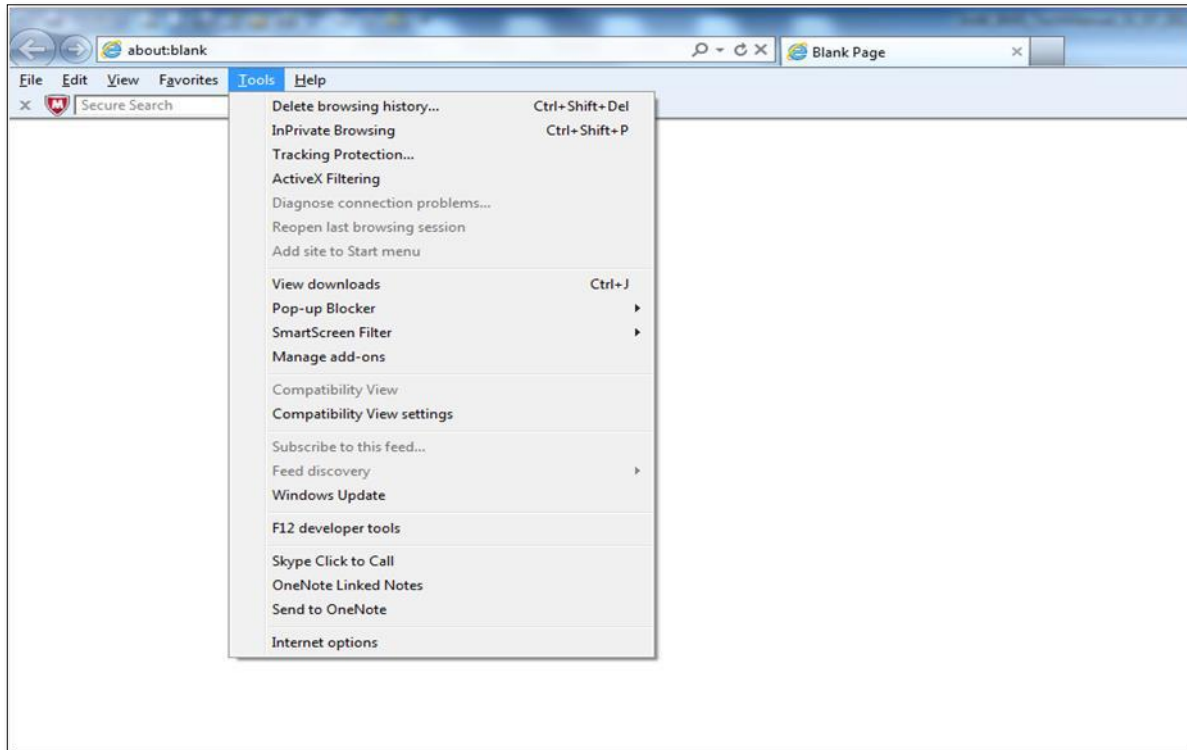


Figure 43- Tools Menu of Internet Explorer

- *Select Internet Options*
- *On the General tab, under the homepage text field enter the URL*
- *Click OK*

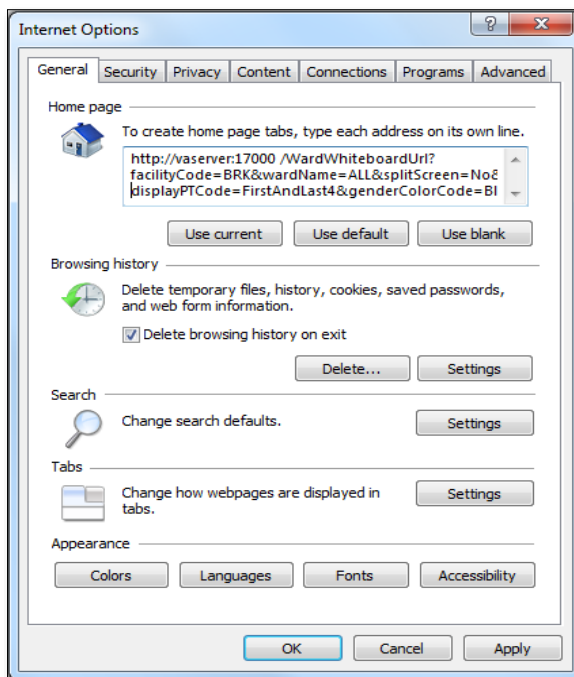


Figure 44- General Tab of Internet Options

2.5.3.5 Add BMS to the “Trusted Sites”

To add BMS to “Trusted Sites” in Internet Explorer

- *Go to Tools>Internet Options>Security>Trusted sites>Sites*
- *In the “Add this website to the zone:” field, enter https://REDACTED.va.gov*
- *Click Add, Click OK*

2.5.3.6 Add the launch of the browser to the Windows start up commands.

The next step is to add to the startup commands the launch of the chosen browser.

NOTE: This operation might differ from one version of Windows to another. For example, for Windows 7 the steps needed are:

- *Click Start*
- *Select All Programs*
- *Right click on the Startup folder*
- *Select Open*

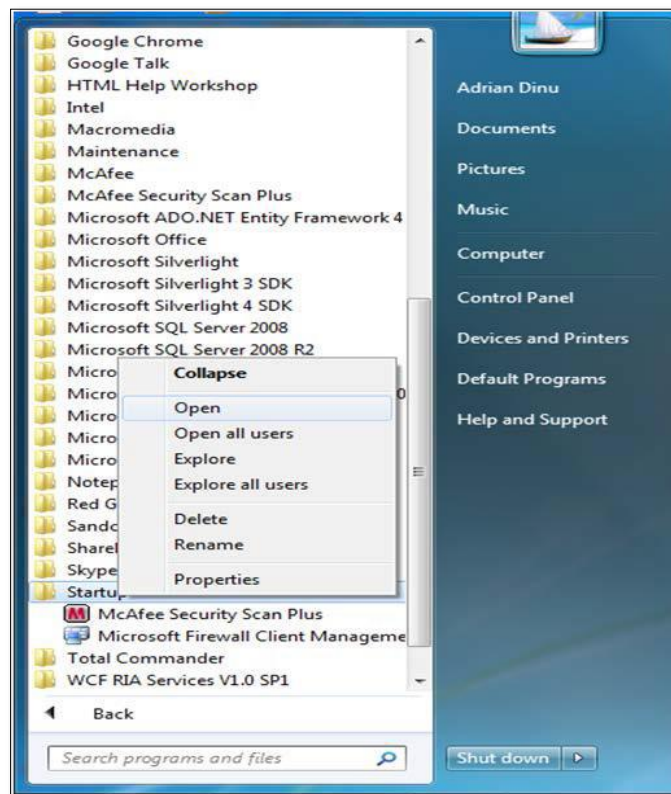


Figure 45- Open Option

- *Create a shortcut of the Internet Explorer and copy it to Startup folder*

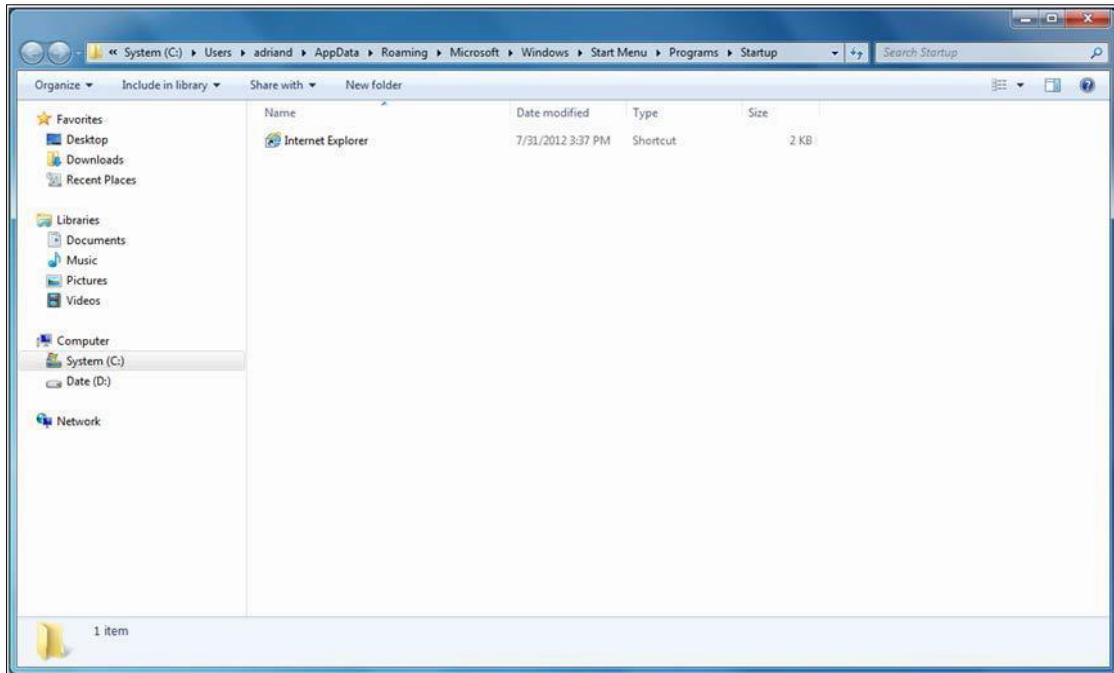


Figure 46- Internet Explorer Shortcut

2.5.3.7 Test the Kiosk

Close Internet Explorer. Restart Internet Explorer. The BMS Ward Whiteboard for the Kiosk should come up.

2.5.3.8 Set the Registry Keys to configure the Kiosk for local site use.

The purpose of the following steps is to configure Kiosk workstation to serve one function only: BMS Ward Whiteboard display. The following instruction leads you through a series of steps that effectively lock down the workstation for this purpose. Access to workstation software and/or desktop will be prevented after the configuration setup is complete. The Whiteboard Kiosk is read only.

*It is recommended that prior to performing the configuration steps outlined in this section a backup of the existing system be created for rollback / recovery purposes, and that a restoration point be created.

- 1) Modify Registry Settings

Restriction.reg

```
Windows Registry Editor Version 5.00

[HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Internet Explorer\Restrictions]
"NoBrowserContextMenu"=dword:00000001
"NoFileOpen"=dword:00000001
"NoOpenInNewWnd"=dword:00000001
```

Figure 47- Windows Registry Editor

- 2) Run Restrictions.reg by double-clicking filename from Windows Explorer. Verify settings have been applied.

3) Modify Local Group Policy Settings

For local group policy changes run gpedit.msc and make the following changes: User Configuration\Administrative Templates\System\Ctr+Alt+Del Options

- Remove TaskManagerDisable
- Remove Lock ComputerEnable
- Remove Change PasswordEnable
- Remove Logoff.....Enable

User Configuration\Administrative Templates\Control Panel\Display

- Password protect the screen saverDisabled

Verify all settings have been applied. The purpose of these settings is to lock down the workstation for one purpose only, BMS Whiteboard Kiosk.

4) Reboot Kiosk Machine to test set up.

*Note; if Kiosk continually “freezes”, please contact the Service Desk to have an IE Refresher script installed.

2.6 Whiteboard Snapshot Configuration

In order to configure the Whiteboard snapshot certain steps, need to be completed:

1. Create snapshot folder
2. Define network share
3. Assign rights to user
4. Assign snapshot folder path to ward group
5. Associate scheduler with the whiteboard report

Suppose the goal is to configure the settings for two BMS Ward Groups: WARD GROUP 1 and WARD GROUP 2.

Assuming that these two Ward groups are in different physical locations, a designated workstation will be assigned for each one of them.

For the purpose of example, these workstations are called: WARDGROUP1-PC and WARDGROUP2-PC.

2.6.1 Create Snapshot Folder

On WARDGROUP1-PC and WARDGROUP2-PC, a folder should be created for this purpose. For example, assume that this folder is on the “C:” drive, like this “C:\WhiteboardSnapshot”.

On Windows 7 the needed operations are:

- Click Start button
- Select All Programs
- Select Accessories folder
- Click Windows Explorer
- Go to C drive

- Right click on C drive
- Select New folder
- Enter the name of the folder, e.g. WhiteboardSnapshot

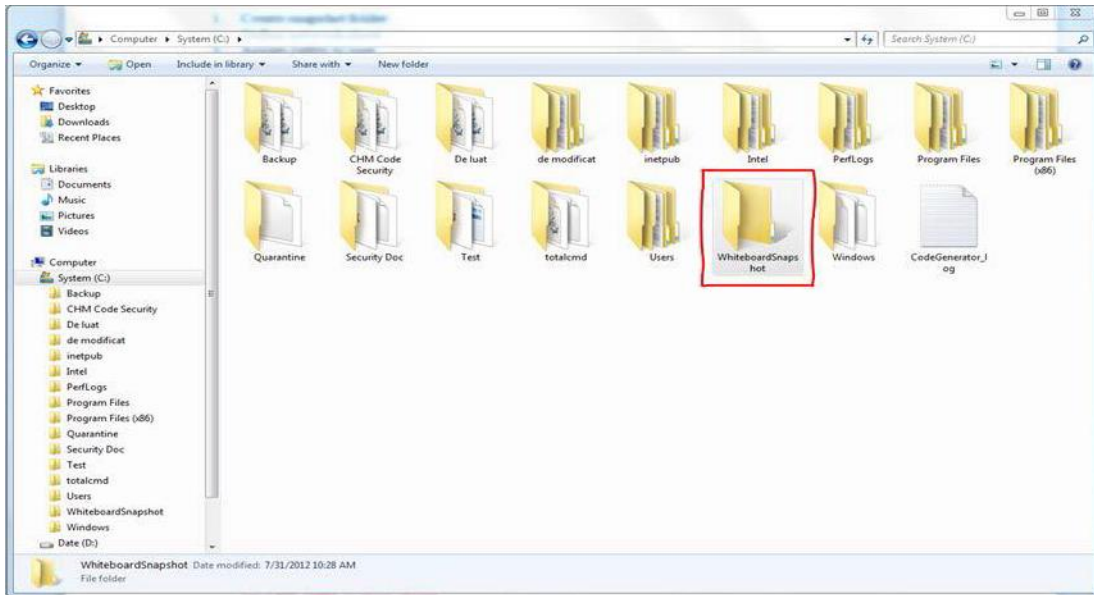


Figure 48- Whiteboard Snapshot Folder

2.6.2 Define Network Share

For these two folders (one on each computer) the Network Admin needs to define network shares. For example, assume that the network share name on each computer is “WhiteboardSnapshot”.

Note: The Windows menu that allows the configuration of folder sharing might be different from one version of Windows to another. For example, for Windows 7 the needed operations are:

- *Navigate to the “WhiteboardSnapshot” folder, right-click it and choose Properties*

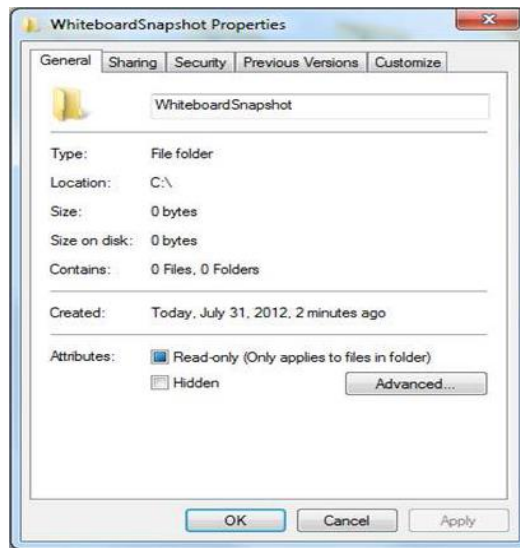


Figure 49- Whiteboard Snapshot Folder Properties

- Go to Sharing tab and select Advance Sharing option.

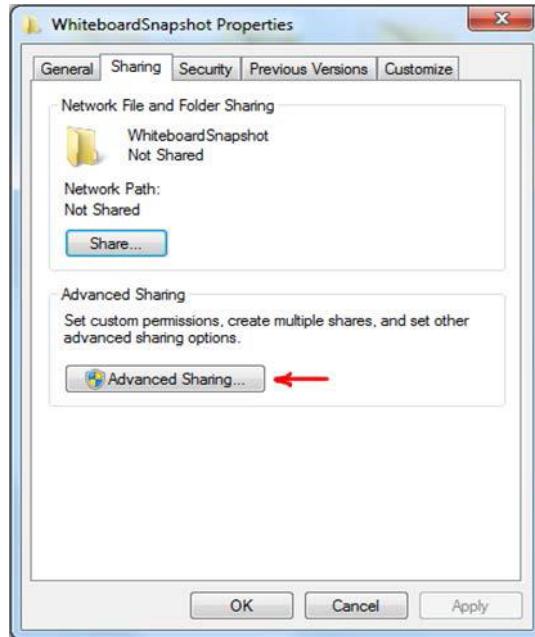


Figure 50- Advanced Sharing Option

- In Advanced Sharing dialog, enable Share this folder option. It will automatically add folder's name as Share name.

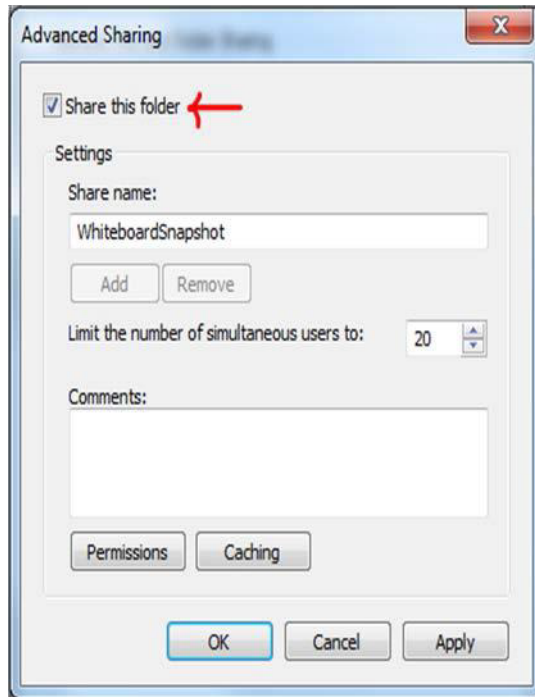


Figure 51- Share this Folder Option

2.6.3 Assign Rights to Master BMS Service Account User

The BMS Application runs under a service account. AICT has created the Windows User (`acc\VAACBMSPrd`) as the master service account that the BMS Services runs under. The Windows user (`acc\VAACBMSPrd`) that is configured to be the Login that runs the four BMS Windows Services needs to have full rights to these shares.

This user must have full control on each facilities file folder that is used to store the Whiteboard Contingency Reports.

On Windows 7 the needed operations are:

- *Having Advanced Sharing window open click on Permissions button to set the folder's permissions.*

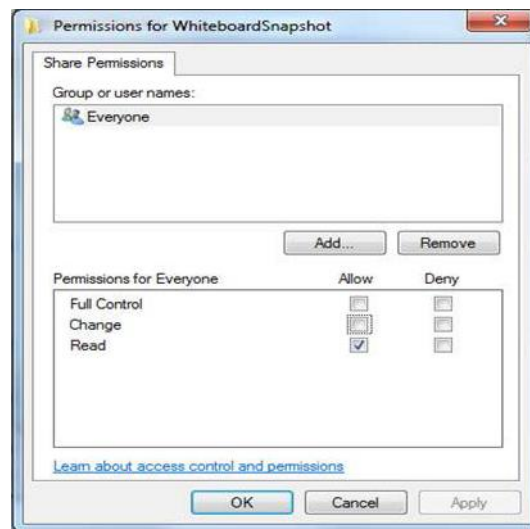


Figure 52- Permissions for Whiteboard Snapshot

- *In the Permissions window click Add button to set the network user rights on the shared folder.*

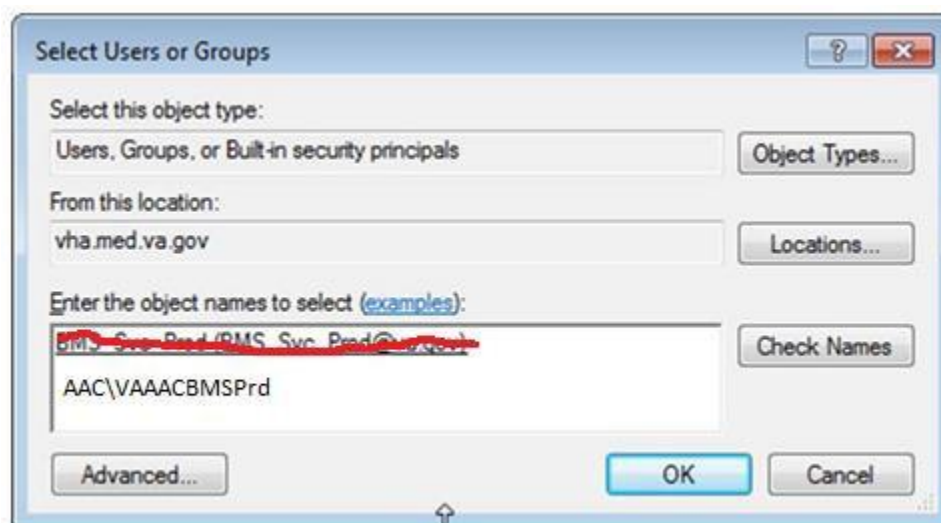


Figure 53-Select Users or Groups Window

- Click “Advanced” button to select user.

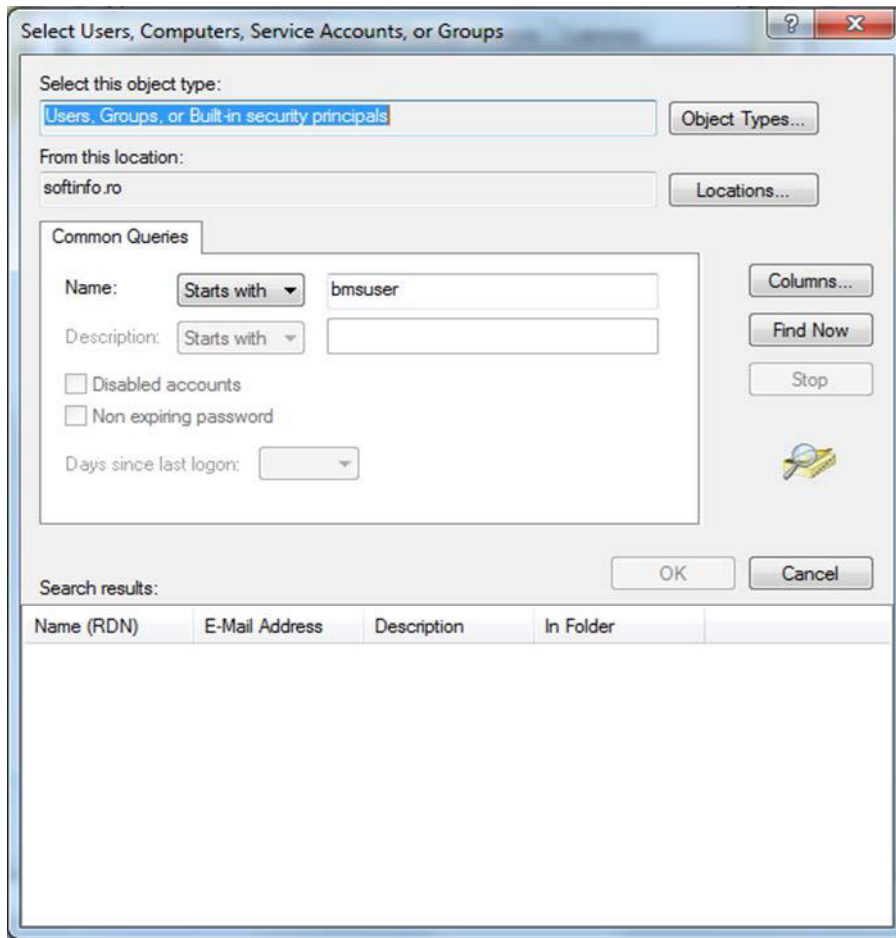


Figure 54- Advanced Section of Select Users or Group Window

- Enter the name of the user (*aac\VAAACBMSPrd*) that runs the two BMS Windows Services. Click Find Now button.

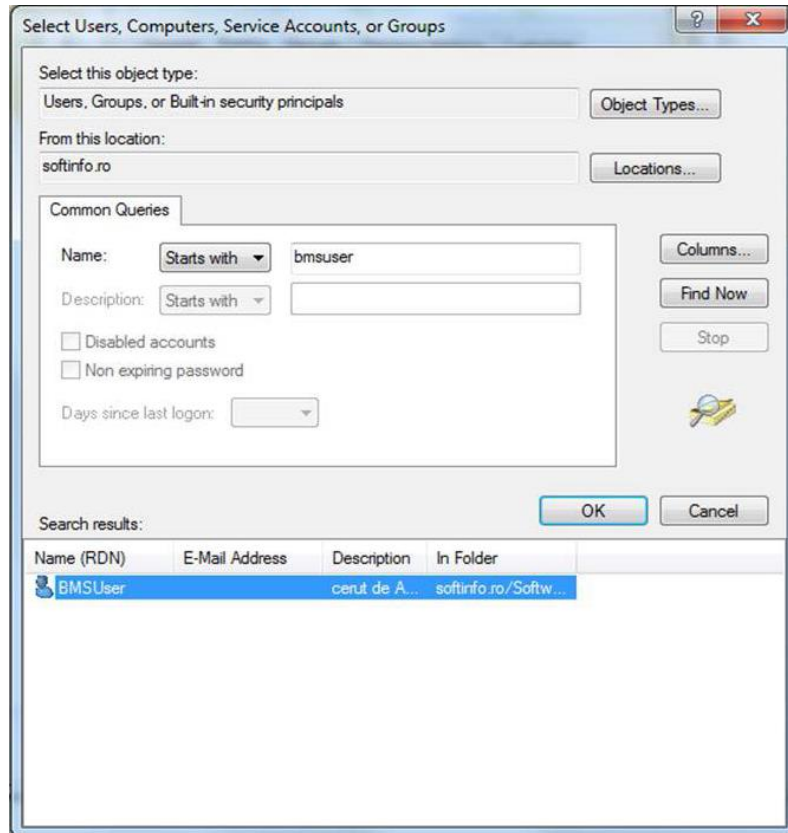


Figure 55- Search Result Section

- Scroll down the Search results section to select the user. Once done, click OK. It will add the user within the object names section.

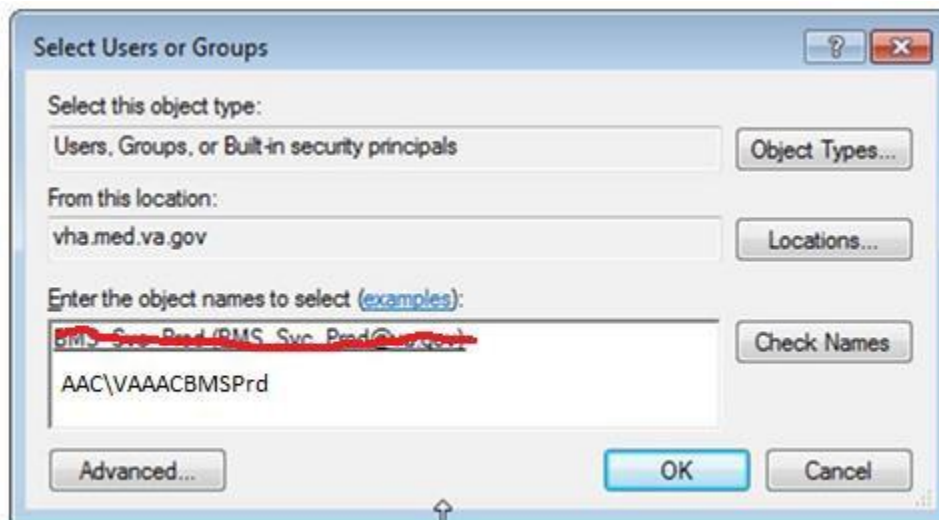


Figure 56- Object Names Section

Clicking *OK* will add folder access permission for user and takes you back to *Permissions* dialog, allowing you to configure the permissions for newly added users.

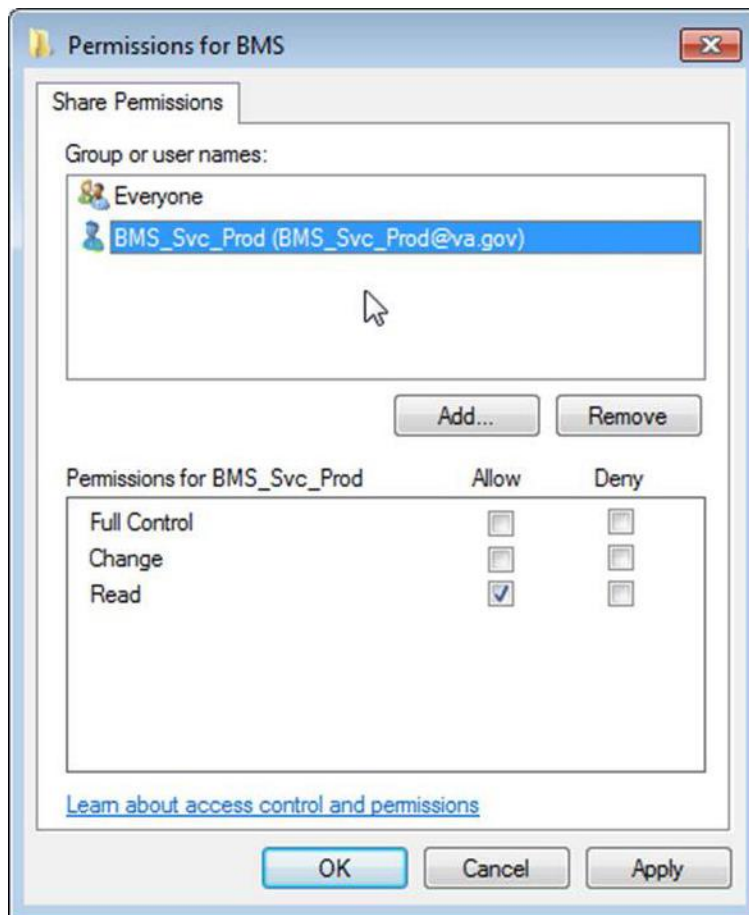


Figure 57- Permissions Window

- *Select user, and from Permissions section check Full Control.*

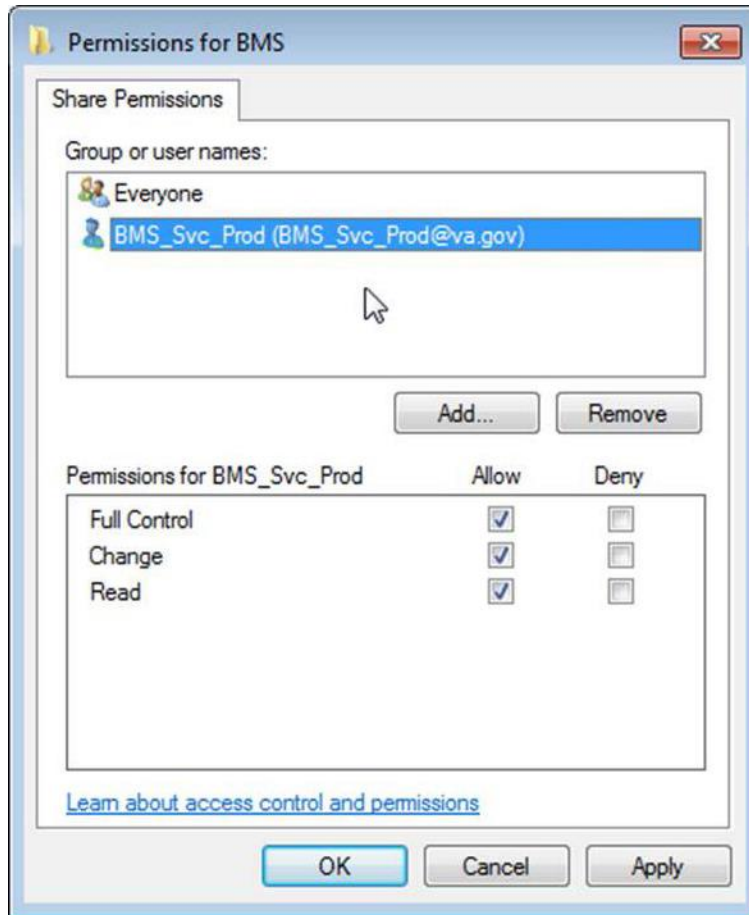


Figure 58- User Permissions

- *Click Ok to close Permissions window. It will take you back to Advanced Sharing window.*

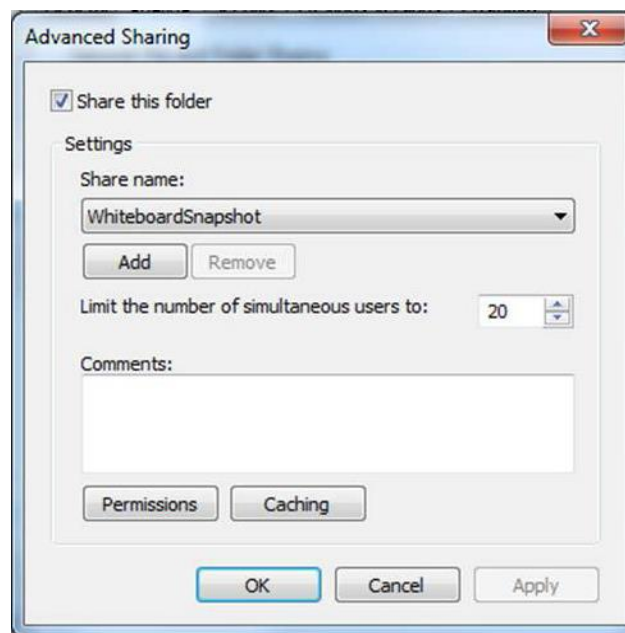


Figure 59- Advanced Sharing Window

- Now, click OK to share the folder.
- Close Whiteboard Snapshot properties window.

Having these two folders shared and having that user given the rights previously mentioned, if someone is logged in the network with that user, he/she could access those folders from Windows Explorer using an URI address. See screenshot below:

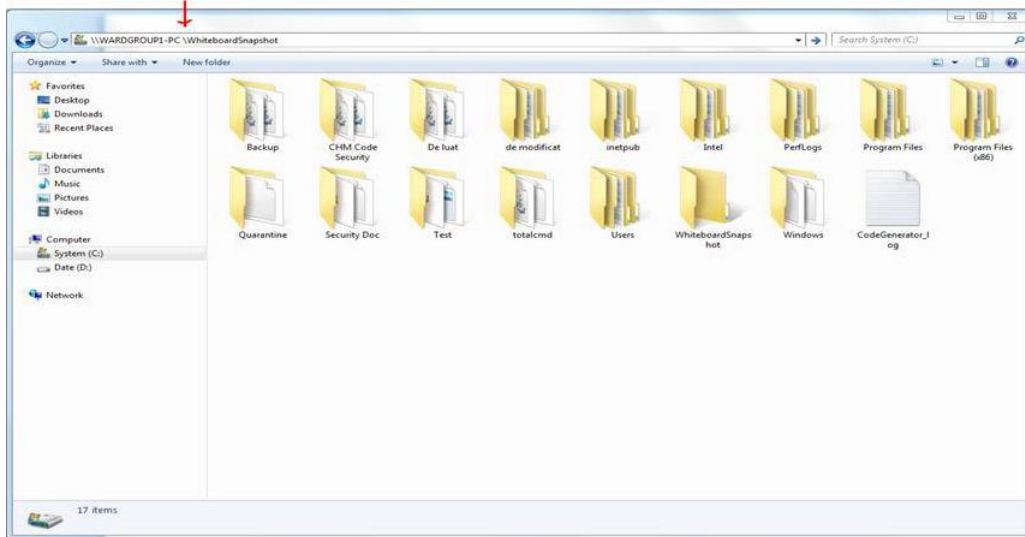


Figure 60- WardGroup1-PC Path

2.6.4 Assign Snapshot Folder Path to Ward Group

Within the BMS Application, under Site Settings and then Contingency Settings page, the Admin should enter the values as captured in the screenshot (\\WARDGROUP1-PC\WhiteboardSnapshot for WARD GROUP 1 and respectively \\WARDGROUP2-PC\WhiteboardSnapshot for WARD GROUP 2).

NOTE: The Windows User (`acc\VAACBMSPrd`) must have full read/write access to this folder.

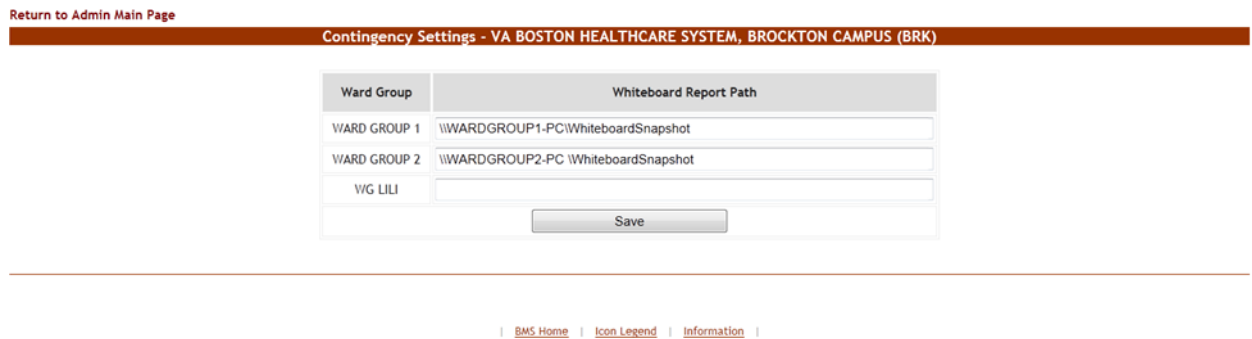


Figure 61-Contingency Settings Page

2.6.5 Associate Scheduler with Whiteboard Report

Within the BMS Application, Facility Home page, under Site Options and then Background Processors page, a Scheduler should be associated in the Whiteboard Report section.

Under the Whiteboard Report section:

- In the “Add/Update Scheduler:” field, select the schedule frequency that Whiteboard should be backed

up.

- Click Save Scheduler button.

[Return to Admin Page](#)

Background Processors - VA BOSTON HEALTHCARE SYSTEM, BROCKTON CAMPUS (BRK)

The screenshot shows a web interface for configuring schedulers. It features two main sections: 'Whiteboard Report' and 'Patients Pending Bed Placement List'. Each section contains a 'Current Scheduler' dropdown menu currently set to 'NONE', and an 'Add/Update Scheduler' dropdown menu. The 'Whiteboard Report' section has 'Every 4 hours' selected in its dropdown. The 'Patients Pending Bed Placement List' section has 'Select A Method' and 'Select A Scheduler' in its respective dropdowns. Both sections have a 'Save Scheduler' button. A 'Cancel' button is positioned at the bottom right of the entire form area.

[BMS Home](#) | [Icon Legend](#) | [Information](#) |

Figure 62- Whiteboard Report Scheduler Association

2.7 EMS Mobile Device Configuration

In order to configure the BMS EMS Mobile Devices, the following steps must be completed:

- The local IS must create a local Service Account with a password that never expires and does not change. This account must not have any kind of policy that restricts its use to specific computers. The EMS Mobile Device will use this account to access the EMS Mobile page. This local Service Account can be the same as the Whiteboard Kiosk Default User Account created in Section 2.5.2.
- Each facility must enter the local Service Account and Password in the EMS Default User and Password fields on the Facilities Settings page.
- Configure the Mobile Device so that when it boots up, it will automatically open IE and go to the specified URL.

2.7.1 Configure EMS Mobile Device Default Login User

For the current facility, a default user must be configured in the BMS application for the EMS Mobile Device.

To accomplish this, the Facility Admin User must do the following:

- Go to the Facility Home Page.
- Click on the Site Options link.
- Click on the Facility Setting link.
- Fill the fields “EMS Default User Name:”, “EMS Password:”, and “EMS Password Confirm:” with the BMS Local Service Account.

| Facility Configuration - VA NORTH TEXAS HEALTH CARE SYSTEM: DALLAS VA MEDICAL CENTER (NTX) | |
|--|--|
| PARAMETER | OPTIONS |
| BMS Server Time Zone | CENTRAL STANDARD TIME |
| Facility Site Time Zone | CST |
| Auto-Removal Patients Pending Bed Placement List? | Yes |
| Integrated Facility? | No |
| Facility Name: | VA NORTH TEXAS HEALTH CARE SYSTEM: DALLAS VA |
| Facility Address 1: | 4500 S. LANCASTER RD. |
| Facility Address 2: | DALLAS, TEXAS 75216 |
| Facility Point-of-Contact: | JEFFREY D ALLEN |
| Facility POC Email: | JEFFREYD.ALLEN@VA.GOV |
| Facility POC Telephone: | 214 857 4607 |
| Local Time Adjust: | 0 |
| EMS Default User Name: | vhantxbedmgmt |
| EMS Password: | |
| EMS Password Confirm: | |
| Whiteboard Kiosk Default User Name: | vhantxbedmgmt |
| Whiteboard Kiosk Password: | |
| Whiteboard Kiosk Password Confirm: | |
| <input type="button" value="Submit"/> <input type="button" value="Cancel"/> | |

[BMS Home](#) | [Icon Legend](#) | [Information](#)

Figure 63- EMS Fields Filled on the Facility Settings Page

- Click the Submit button.

Table 16-Facility Settings Page Parameters

| Column | Description |
|------------------------|--|
| EMS Default User Name: | The BMS Service Account ID needed to load the EMS Mobile Page for Mobile Devices. |
| EMS Password: | The BMS Service Account ID password needed to load the EMS Mobile Page for Mobile Devices. |
| EMS Password confirm: | The confirmation of the password. |

This setup can also be completed by the system Support User:

- Go to the BMS Admin Page
- Click on the Edit BMS Facility Settings link
- Click on the Facility Name Drop Down and select the name of the Facility to be configured
- Fill the fields “EMS Default User Name”, “EMS Password” and “EMS Password Confirm” with the BMS Local Service Account

Admin Menu ADMINISTRATION SECTION - FACILITY EDIT Logout

Select Facility Name: NTX - DALLAS (549 - ACTIVE: YES)

Facility Site ID: NTX

Full Facility Name: VA NORTH TEXAS HEALTH CARE SYSTEM: DALLAS VA

Facility Point-of-Contact: JEFF ALLEN

Facility POC Email: JEFFREYD.ALLEN@VA.GOV

Facility POC Telephone: 214.957.4607

Facility Address 1: 4500 S. LANCASTER RD.

Facility Address 2: DALLAS, TEXAS 75216

Facility City/State/ZIP: DALLAS TX 75216

User operations:

| Selected | User Name | BMS, Read | BMS, Write |
|--------------------------|---------------------------|-------------------------------------|--------------------------|
| <input type="checkbox"/> | aac.dva.va.gov/VAACBARKSJ | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | aac.dva.va.gov/vaacherms | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

VSN: BMS Server Time Zone:

Region: Facility Site Time Zone:

BMS Active/Live Site? Auto-Removal Patients Pending Bed Placement List?

Integrated Facility? Medical Center ID #?

Integrated Site List:

Ward Prefix:

Ward Suffix:

ADT Prefix:

ADT Suffix:

EMS Mail Sender: Event Mail Sender:

Site Alias:

Site Alias:

Local Time Adjust:

EMS Default User Name: Whiteboard Kiosk Default User Name:

EMS Password:

Whiteboard Kiosk Password:

EMS Password Confirm: Whiteboard Kiosk Password Confirm:

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Figure 64-EMS Fields Filled on the BMS Admin Page

- Click the Submit button

Table 17-BMS Admin Page Parameters

| Column | Description |
|------------------------|--|
| EMS Default User Name: | The BMS Service Account ID needed to load the EMS Mobile Page for Mobile Devices. |
| EMS Password: | The BMS Service Account ID password needed to load the EMS Mobile Page for Mobile Devices. |
| EMS Password confirm: | The confirmation of the password. |

2.7.2 Configure EMS Mobile Device URL

For the current facility, the EMS Device URL must be configured in the EMS Mobile Device. The URL

to be entered has a special format:

<https://REDACTED.va.gov/EMSMobileLogon?code=BRK>.

Table 18-Description and Configuration for EMS Mobile Device URL Parameters

| Parameter | Short Description | Options |
|-----------|--|------------------------------------|
| Code | Code of facility (e.g. BROCKTON = BRK) | Enter the 3-character facility ID. |

EMS staff can access the BMS Web page for mobile devices at the URL set up by their local IS staff. Be sure to use the code of the facility for which access is needed.

The following page is displayed:

Bed Management Solution

VA BOSTON HEALTHCARE SYSTEM, BROCKTON CAMPUS (BRK)



Figure 65-EMS Staff Page for Mobile Devices

2.8 VistA Integration

This chapter describes the process of importing vocabularies, entities, patient admission, transfer, discharge (ADT) and patient pending bed placement information from VistA.

In order to integrate with VistA certain steps should be completed:

1. Choose VistA site
2. Define Schedulers
3. Run Scheduler
4. View Audit Results

2.8.1 Choose VistA Site

VistA Sites tab from Background Processors page of Admin section allows the user to view the list of VA facility sites sharing the same VistA instance and to add a new VA facility to a VistA instance.

2.8.1.1 Adding a New VistA Site

To add a VA facility site to a VistA instance follow the steps presented below.

1. From the Background Processors page of Admin section select VistA Sites to display the page in the following image. A list of VA facility sites is displayed in the column to the left of the page.

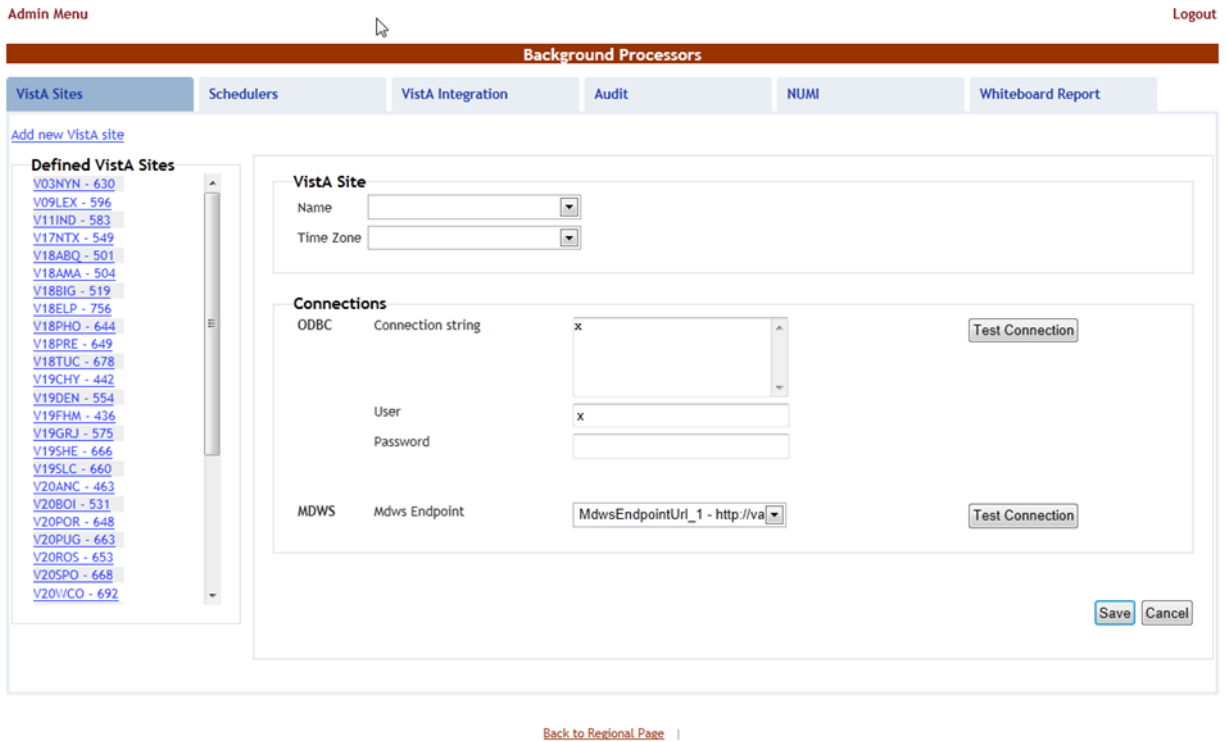


Figure 66-Adding a VistA Site

- Click the Add new VistA site link then from the VistA Site area use the Name field to select the code of the site you want to add to the current VistA instance, and then select the Time Zone.

In the Connections area you can choose between two connection methods: ODBC, MDWS and VIA. Fill in the following data for the ODBC method:

Table 19-New VistA Site Parameters

| Column | Description |
|-------------------|---|
| Connection String | The connection string for the ODBC method. |
| User | The username for the connection. |
| Password | The password associated to the user account. |
| MDWS Endpoint | ***MDWS available to be selected but no longer supported. |
| VIA | Select VIA connector. |

You can use the Test Connection buttons to verify the connection and press the Save button to enter the data into the system.

The newly added site will be added in the sites list to the left of the screen.

2.8.2 Define Schedulers

The Schedulers tab from Background Processors page of Admin section displays a list of schedulers defined by user. It allows the user to add new schedulers, edit or remove old schedulers.

NOTE: To run the schedulers, the VistA Integration tab must be used (see next section VistA Integration

for details).

The Schedulers tab is displayed as in the following image:

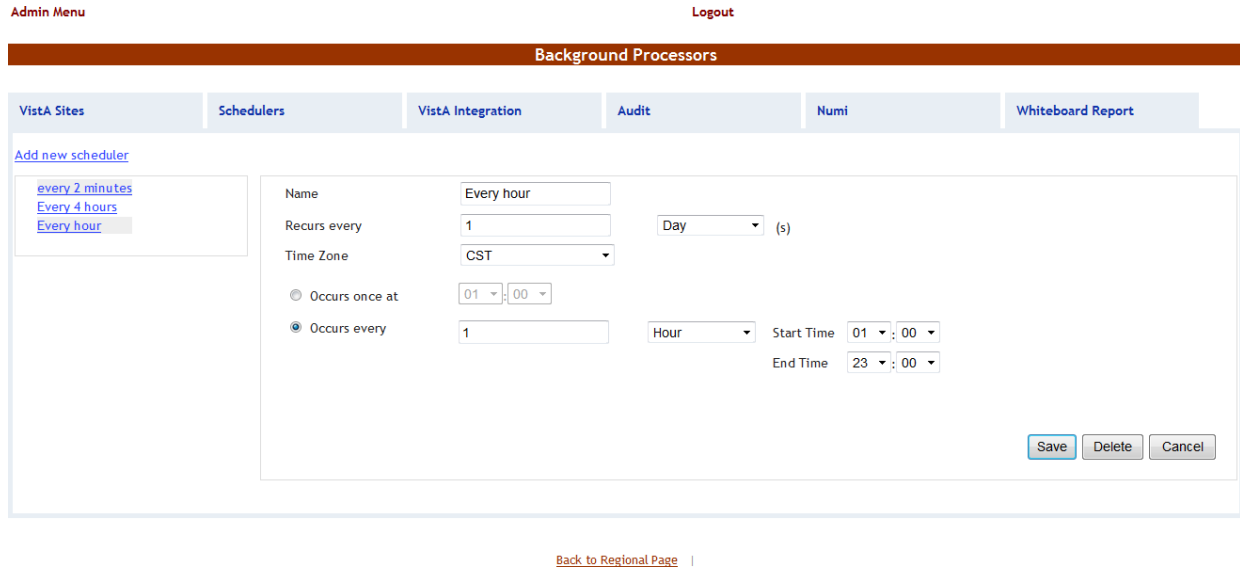


Figure 67-Schedulers Tab

2.8.2.1 Adding a New Scheduler

To add a new scheduler follow the steps presented below.

1. From the Background Processors page select the Schedulers tab.
2. In the Schedulers tab fill in the following data:

Table 20-New Scheduler Parameters

| Column | Description |
|-----------------------------|--|
| Name | The name of the scheduler. |
| Recurs every | The frequency. |
| Time Zone | Time zone associated with the scheduler. |
| Occurs once at/Occurs every | The frequency values. |

After setting the desired frequency for the new scheduler, do not forget to press the Save button to enter the data into the system.

2.8.3 Run Scheduler

The VistA Integration tab is used to run (automatically or manually) the defined schedulers and to select which data categories will be affected by a scheduler’s action.

The VistA Integration tab is displayed as in the following image:

Admin Menu Logout

Background Processors

VistA Sites Schedulers VistA Integration Audit Numi Whiteboard Report

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| | Current Method | Current Scheduler | |
|--|----------------|-------------------|---|
| <input type="checkbox"/> ADT | MDWS | Every 4 hours | Details Data: <input type="text" value="Specialty"/> Method: <input type="text" value="MDWS"/> Scheduler: <input type="text" value="Every 4 hours"/> <input type="button" value="Save"/> <input type="button" value="Cancel"/> |
| <input type="checkbox"/> Patients Pending Bed Placement List | | | |
| <input type="checkbox"/> Vocabularies | | | |
| <input type="checkbox"/> Orderable Item | | | Run Job Method: <input type="text" value="MDWS"/> Start Time: 09/07/12 <input type="text" value="00:00"/> End Time: 09/07/12 <input type="text" value="00:00"/> <input type="button" value="Run"/> |
| <input type="checkbox"/> Specialty | MDWS | Every hour | |
| <input type="checkbox"/> Treating Specialty | | | |
| <input type="checkbox"/> Facility Movement Type | | | |
| <input type="checkbox"/> Entities | | | |
| <input type="checkbox"/> Hospital Location | MDWS | every 2 minutes | |
| <input type="checkbox"/> Patient | | | |
| <input type="checkbox"/> Room Bed | | | |
| <input type="checkbox"/> Ward Location | | | |
| <input type="checkbox"/> Medical Center Division | | | |

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Figure 68-VistA Integration Tab

From the field in the upper part of the page select the VistA site where the scheduler(s) will run.

Next step:

- Either click one data category from the column to the left (its name will appear in the Data field) and then select a method and scheduler from the Method and Schedulers fields in the Details area: this will cause the selected scheduler to run at the time set for it in the Schedulers tab and to bring data from the selected category.
- Or select several data categories (using the check-boxes) then select a connection method from the Run Job area, set the Start time/End time and click the Run button: this will cause the scheduler set using the selected method to start running now and bring the data from the selected categories.

2.8.4 View Audit Results

The Audit tab displays the results of the operations performed in the VistA Integration tab.

The Audit tab is displayed as shown in the following image.



Figure 69- Audit Tab

The options to the left of the page allow the user to determine the filter criteria for the generated audit reports. The options to the right of the screen allow the user to select the type of operation to be captured by the audit report as well as the time interval for the audit.

After selecting the desired criteria, click the Filter by button to display the page as in the following image.

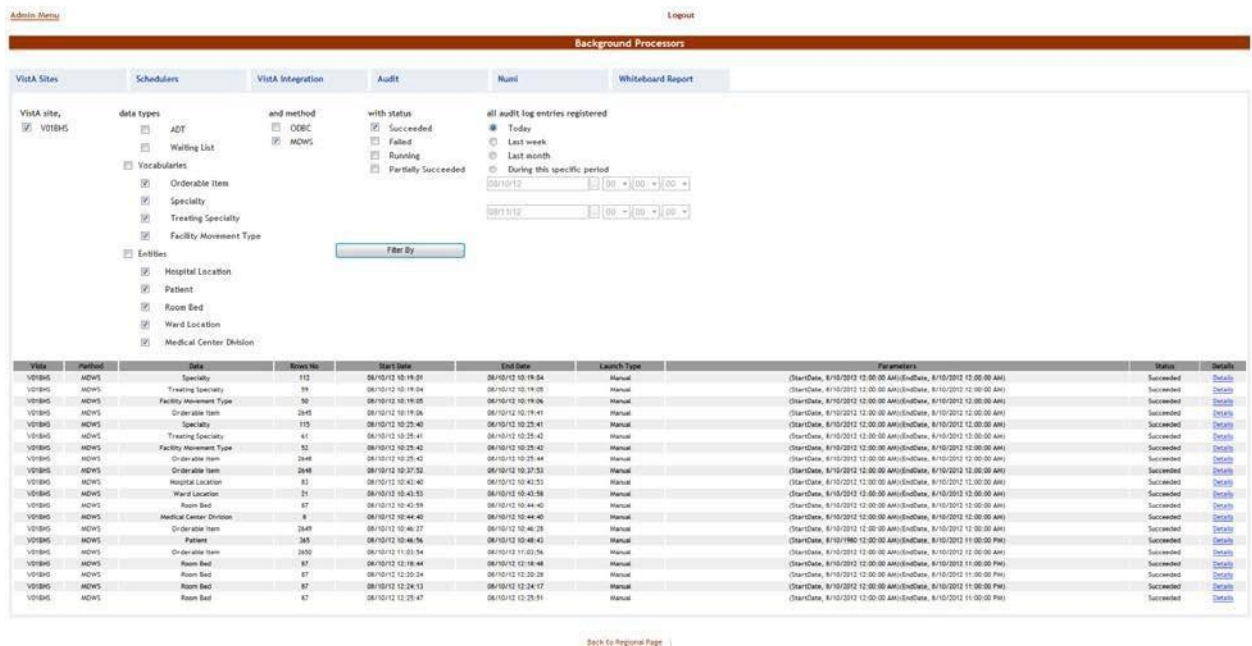


Figure 70- View Audit Results

A list of operations is displayed. For each entry the following data is available:

Table 21-View Audit Results Columns Report

| Column | Description |
|-------------|---|
| VistA | The VistA site where the audit action has been performed. |
| Method | The method used for connecting to the VistA site. |
| Data | The type of data retrieved by the VistA integration operation. |
| Rows no | The number of operations of the selected type captured by the audit action. |
| Start Date | The start date of the retrieval operation. |
| End Date | The end date of the retrieval operation. |
| Launch Type | The way the audit action has been launched. |
| Parameters | Audit operation start date and time, and end date and time. |
| Status | The status of the VistA integration action. |
| Details | Clicking this link will display the number of entries in the report. |

2.9 NUMI Integration

This chapter describes the process of importing patient level of care information from NUMI.

NUMI connects to VistA for synchronization of patient data using the NUMI Web Service that is part of the Commercial Off the Shelf McKesson product. Authentication to the NUMI Web Service is done by a NUMI supplied secret key.

NUMI Patient Level of Care transaction involves the following steps:

- Change patient level of care in NUMI.
- BMS Reader component will detect the patient level of care in NUMI.
- Patient level of care will be retrieved through a web service method call.
- BMS Writer component will update patient level of care in BMS database.

Integration Settings

There are a limited number of configuration parameters for NUMI.

- Secret Key
- Number of sites per call
- Path to NUMI web service

These configurations are stored in BMS.Service.Host.exe.config

The current secret key is: <authorization key>

The number of site per call parameter how many sites will be bundled together in a transaction to NUMI. If this number is increased one should consider the frequency in which the calls are scheduled. Adding more sites will increase the transaction size and length.

Currently all NUMI servers operate on port 100 at the specified endpoint
<https://<servername>.aac.dva.va.gov/Inpatient.asmx>.

In order to integrate with NUMI certain steps should be completed:

1. Choose VistA site
2. Define Schedulers
3. Select Scheduler

2.9.1 Choose VistA Site

This step is the same as the one performed on VistA Integration process and can be referenced from [Section 2.7.1](#).

2.9.2 Define Schedulers

The process of defining schedulers can be referenced from Vista Integration process, [Section 2.7.2](#).

2.9.3 Select Scheduler

The NUMI tab is used to select the scheduler that will connect to the NUMI server and will retrieve data for a certain VistA site.

The NUMI tab is displayed as in the following image.



Figure 71-NUMI Tab

From the Schedulers field select the scheduler created to retrieve the NUMI data then click the Add button: following page is displayed.

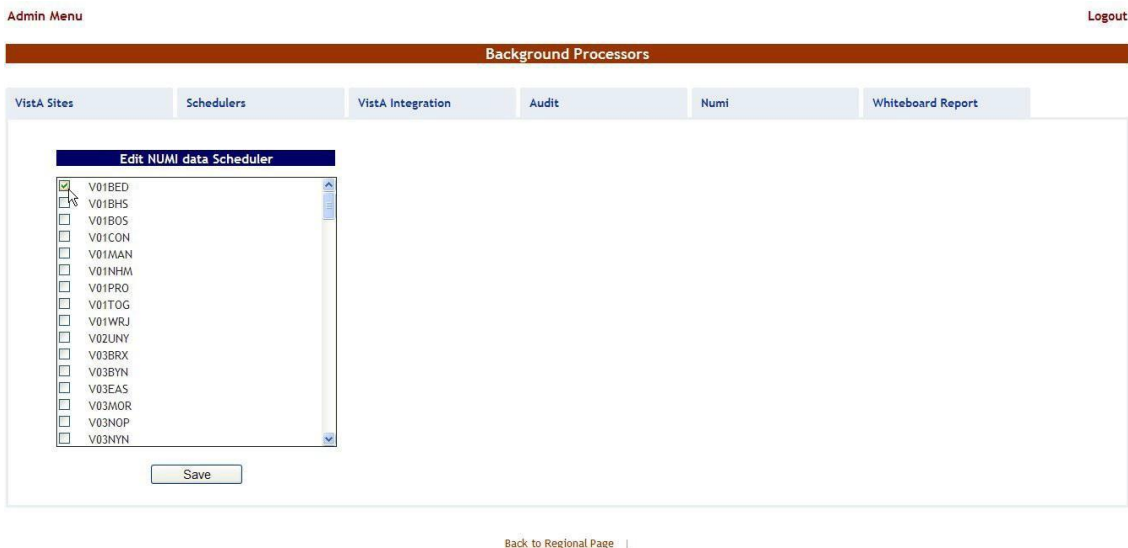


Figure 72- Selecting the VistA Site for NUMI data

Select the VistA site for which the selected scheduler will retrieve NUMI data then press the Save button. Use the Edit link to select a different site for which the scheduler should retrieve NUMI data.

3 Application structure

3.1 Application Components

BMS application consists of the following components:

- BMS Databases (BMS Database, BMS Authz, BMS EIS, BMS EVS, BMS_DS, BMS_DW, BMS InstanceStore and BMS History)
- BMS Services (BMS Service and Win ServiceHost)
 - BMS Service
 - Win Service Host (EIS Service, EVS Service, PAP service, PDP service, RS service and STS service)
- BMS Web Site
- WMI UserGroup

3.2 Application Directory Structure

BMS application directory is structured as is presented below:

```
+---Consoles
| +---PolicyManager
+---Databases
| \---SQLData
| | \---Job Logs
| | \---WMI_UserGroup
+---Services
| +---BMS
| | \---DBRepository
| | \---LinqToSql
| | \---LocalReportWhiteboard
| | \---Scripts
| +---EIS
| | \---DBRepository
| +---EVS
| | \---DBRepository
| +---PAP
| | \---DBRepository
| +---PDP
| +---RS
| +---Shared
```

```
| \---STS
+---WebSite
| +---bin
| | \--- LocalReportWhiteboard
| | \--- Scripts
| +---Content
| | \---images
| | +---themes
| | | +---base
| | | \---images
| +---Reporting
| +---ReportsLocal
| +---Scripts
| \---Views
```

3.3 Database Architecture

The BMS Database implementation is comprised of three main parts:

- BMS Database
 - BMS_EVS (Enterprise Vocabulary database)
 - BMS_EIS (Entity Identification Services database)
 - BMS_AUTHZ (Authorization database)
 - BMS (Bed Management database).
 - BMS_History (BMS Transactional History)
 - BMS_InstanceStore (BMS Instances)
- BMS_DS – Data Loaded by an ETL job
- BMS_DW - Data Loaded by an ETL job

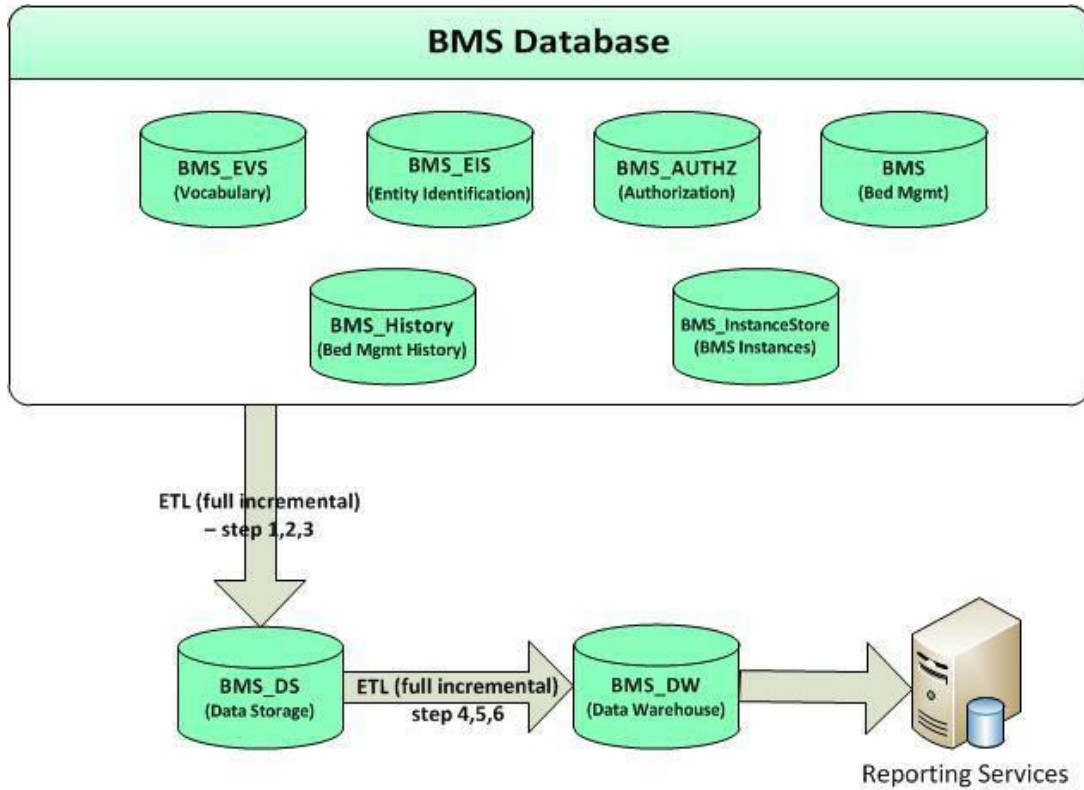


Figure 73-Database Architecture

3.4 Component Files

A list with files for each BMS component is presented below:

Table 22-BMS Database Files

| Relative Path | File | Description |
|--|--------------------|--|
| Databases\SQLData Databases\SQLData2 Databases\SQLLogs | BMS_Data.mdf | Database files (BMS database, BMS Authz, BMS EIS, BMS EVS....) |
| | BMS_Data_F.ndf | |
| | BMS_Log.ldf | |
| | BMS_AUTHZ_Data.mdf | |
| | BMS_AUTHZ_Log.ldf | |
| | BMS_DS_Data.mdf | |
| | BMS_DS_Data_F.ndf | |
| | BMS_DS_Log.ldf | |
| | BMS_DW_Data.mdf | |
| | BMS_DW_Log.ldf | |
| BMS_EIS_Data.mdf | | |

| Relative Path | File | Description |
|---------------------------------|-----------------------------------|--|
| | BMS_EIS_Data_F.ndf | |
| | BMS_EIS_Log.ldf | |
| | BMS_EVS_Data.mdf | |
| | BMS_EVS_Data.ndf | |
| | BMS_EVS_Log.ldf | |
| | BMS_HISTORY_Data.mdf | |
| | BMS_HISTORY_Data_F.ndf | |
| | BMS_HISTORY_Log.ldf | |
| | BMS_InstanceStore_Data.mdf | |
| | BMS_InstanceStore_Log.ldf | |
| Databases\SQLData\Job_Logs | BMS_Reports_Log.txt | BMS Report Full job file log and BMS Incremental job file log. |
| | BMS_Reports_Log_Incremental.txt | |
| Databases\SQLData\WMI_UserGroup | AdapterRepository.dll | Binaries of WMI UserGroup application. |
| | Common.dll | |
| | connectionConfiguration.config | |
| | Connections.SingleDatabase.dll | |
| | ContextWriter.dll | |
| | General.MT.dll | |
| | Infoworld.Configuration.dll | |
| | MiddleTier.dll | |
| | MS.Common.dll | |
| | MS.Configuration.dll | |
| | MS.Connections.dll | |
| | WMI_UserGroup.exe | |
| | WMI_UserGroup.exe.config | |
| | WMI_UserGroup.vshost.exe | |
| | WMI_UserGroup.vshost.exe.config | |
| | WMI_UserGroup.vshost.exe.manifest | |
| | Connections.xml | File used to set the connection to the database. |

| Relative Path | File | Description |
|---|--|---|
| Databases\SQLData\WMI_UserGroup\ DBRepository | InfoWorld.WMI_UserGroup.DTO.DTOUserGroupDomain.xml | XML mapping file which contain mapping definitions between ePractice datasets and SQL tables. The dataset is specified by setting the <MyDataSetInfo> tag. The table to interact with – specified through the <MyDataTable> tag – is defined by four commands – usually stored procedures – which represent the Create, Read, Update and Delete (CRUD) operations which can be performed on the table: select (Read), insert (Create), update (Update) and delete (Delete). Stored procedure parameters are passed from these datasets and mapped in the same XML file. |

Table 23-BMS Service Files

| Relative Path | File | Description |
|--------------------------|-------------------------------|----------------------------------|
| Services\BMS | AdapterRepository.dll | The binaries of the BMS Service. |
| | AuditTrailSender.dll | |
| | AuthenticationProxy.dll | |
| | AuthorizationSubscriber.dll | |
| | BMS.Contracts.dll | |
| | BMS.Facade.dll | |
| | BMS.Facade.Contracts.dll | |
| | BMS.Host.dll | |
| | BMS.MT.dll | |
| | BMS.MT.dll.config | |
| | BMS.Numi.dll | |
| | BMS.Schedulers.dll | |
| | BMS.Security.dll | |
| | BMS.ServiceHost.exe | |
| | BMS.ServiceHost.exe.config | |
| | BMS.ServiceImplementation.dll | |
| | BMS.ServicesWrapper.dll | |
| | BMS.UnitTesting.dll | |
| | BMS.UnitTesting.dll.config | |
| | BMS.Utils.dll | |
| BMS.VistaIntegration.dll | | |

| Relative Path | File | Description |
|---------------|---|-------------|
| | BMS.VistaIntegration.Cache.dll | |
| | BMS.VistaIntegration.Data.dll | |
| | BMS.VistaIntegration.HL7.dll | |
| | BMS.VistaIntegration.Mdws.dll | |
| | BMS.VistaIntegration.UnitTesting.dll | |
| | BMS.VistaIntegration_Accessor.dll | |
| | BMS.VistaWorker.dll | |
| | BMS.VistaWorker.Reader.dll | |
| | BMS.VistaWorker2.Writer.dll | |
| | BMS.Web.dll | |
| | BMS.WhiteboardReport.dll | |
| | BMS.Workflows.CustomActivities.dll | |
| | BMS.Workflows.PropertyPromotionActivity.dll | |
| | BMS.Workflows.WF.dll | |
| | Castle.Core.dll | |
| | Common.dll | |
| | connectionConfiguration.config | |
| | Connections.SingleDatabase.dll | |
| | ContextWriter.dll | |
| | DataUtil.dll | |
| | FakeltEasy.dll | |
| | General.MT.dll | |
| | HL7DataTypes.dll | |
| | IContracts.dll | |
| | ICTSEdit.dll | |
| | Infoworld.Configuration.dll | |
| | InterSystems.Data.CacheClient.dll | |
| | log4net.dll | |
| | Mdws2ORM.dll | |
| | Microsoft.Web.Mvc.dll | |
| | MiddleTier.dll | |
| | MS.Common.dll | |

| Relative Path | File | Description |
|---------------------------|----------------------------------|--|
| | MS.Configuration.dll | |
| | MS.Connections.dll | |
| | PAPProxy.dll | |
| | RS.Contracts.dll | |
| | Saml20.dll | |
| | SecurityTokenCache.dll | |
| | trace.log | |
| | Tracing.dll | |
| | VistASites.xml | |
| | Xacml2.dll | |
| | XacmlCore.dll | |
| Services\BMS\DBRepository | BMS.MT.Admission.xml | XML mapping files which contains mapping definitions between ePractice datasets and SQL tables. The dataset is specified by setting the <MyDataSetInfo> tag. The table to interact with – specified through the <MyDataTable> tag – is defined by four commands – usually stored procedures – which represent the CRUD operations which can be performed on the table: select (Read), insert (Create), update (Update) and delete (Delete). Stored procedure parameters are passed from these datasets and mapped in the same XML file. Connections.xml file is used to set the connection string to BMS database. |
| | BMS.MT.AdmissionInfo.xml | |
| | BMS.MT.AdmissionLevelOfCare.xml | |
| | BMS.MT.BedCleanInfo.xml | |
| | BMS.MT.BedCleaning.xml | |
| | BMS.MT.BedCleanMobileInfo.xml | |
| | BMS.MT.BedDNDAndOOSFromVista.xml | |
| | BMS.MT.BedOccupancyCount.xml | |
| | BMS.MT.BedOccupancyInfo.xml | |
| | BMS.MT.BedStaff.xml | |
| | BMS.MT.BedStaffHistory.xml | |
| | BMS.MT.BedSwitch.xml | |
| | BMS.MT.BedUnavailable.xml | |
| | BMS.MT.BedUnavailableHistory.xml | |
| | BMS.MT.BedUnavailableInfo.xml | |
| | BMS.MT.CancelableOrderInfo.xml | |
| | BMS.MT.Configuration.xml | |
| | BMS.MT.Discharge.xml | |
| | BMS.MT.Diversion.xml | |
| | BMS.MT.EISOrganization.xml | |
| | BMS.MT.EmsStaff.xml | |

| Relative Path | File | Description |
|------------------------------------|--|---|
| | BMS.MT.EvacuationPatients.xml | |
| | BMS.MT.IconAssociation.xml | |
| | BMS.MT.IconAssociationInfo.xml | |
| | BMS.MT.IconDetail.xml | |
| | BMS.MT.IconInfo.xml | |
| | BMS.MT.IconOrder.xml | |
| | BMS.MT.JobAudit.xml | |
| | BMS.MT.JobAuditInfo.xml | |
| | BMS.MT.LastActInfo.xml | |
| | BMS.MT.LevelOfCare.xml | |
| | BMS.MT.LoggedUser.xml | |
| | BMS.MT.Movement.xml | |
| | BMS.MT.NewEvent.xml | |
| | BMS.MT.OccupiedBedInfo.xml | |
| | BMS.MT.PatientIconAssociation.xml | |
| | BMS.MT.PatientLocation.xml | |
| | BMS.MT.PatientsWaitingCount.xml | |
| | BMS.MT.PatientWaitingDateView.xml | |
| | BMS.MT.PatientWaitingStandardView.xml | |
| | BMS.MT.Transfer.xml | |
| | BMS.MT.TransferInfo.xml | |
| | BMS.MT.VistaIntegrationLog.xml | |
| | BMS.MT.VistaOperation.xml | |
| | BMS.MT.WaitingListItem.xml | |
| | BMS.MT.WaitingListReport.xml | |
| | ConfigurationService.DataAccess.ConfigurationsBE.xml | |
| | Connections.xml | |
| Services\BMS\LocalReportWhiteboard | WardWhiteboard.rdlc | Ward whiteboard report file. |
| Services\BMS\Scripts | conditional-validation.js | JavaScript conditional validation file. |

Table 24-WIN Service Host Files

| Relative Path | File | Description |
|---------------------------|--|---|
| Services\EIS | BindingExtensions.dll | Binaries of the EIS Service. |
| | DTOGenericService.dll | |
| | DTOHL7Service.dll | |
| | EISAuditUtil.dll | |
| | EISAutomaticLink.dll | |
| | EISCache.dll | |
| | EISContracts.dll | |
| | EISDataAccess.dll | |
| | EISNotifications.dll | |
| | EISServiceGenericImplementation.dll | |
| | EISServiceHL7Implementation.dll | |
| | EISServiceImplementation.dll | |
| | EISServiceImplementation.dll.config | |
| | ICSharpCode.SharpZipLib.dll | |
| Services\EIS\DBRepository | Connections.xml | XML mapping files which contains mapping definitions between ePractice datasets and SQL tables. The dataset is specified by setting the <MyDataSetInfo> tag. The table to interact with – specified through the <MyDataTable> tag – is defined by four commands – usually stored procedures – which represent the CRUD operations which can be performed on the table: select |
| | InfoWorld.EIS.DTOGenericService.DTOAutomaticLink.xml | |
| | InfoWorld.EIS.DTOGenericService.DTODomain.xml | |
| | InfoWorld.EIS.DTOGenericService.DTOEntity.xml | |
| | InfoWorld.EIS.DTOGenericService.DTOEntityType.xml | (Read), insert (Create), update (Update) and delete (Delete). Stored procedure parameters are passed from these datasets and mapped in the same XML file. Connections.xml file is used to set the connection string to BMS_EIS database. |
| | InfoWorld.EIS.DTOGenericService.DTOEntityTypeClassifier.xml | |
| | InfoWorld.EIS.DTOGenericService.DTOEntityTypeTraitCoresp.xml | |
| | InfoWorld.EIS.DTOGenericService.DTOTrait.xml | |
| | InfoWorld.EIS.DTOGenericService.DTOTraitAssignment.xml | |
| | InfoWorld.EIS.DTOGenericService.EntityManagement.DTOEntityManageLink.xml | |
| | InfoWorld.EIS.DTOGenericService.EntityManagement.DTOEntityMerge.xml | |
| | InfoWorld.EIS.DTOGenericService.EntityManagement.DTOEntitySetStatus.xml | |
| | InfoWorld.EIS.DTOGenericService.LinkAlgorithmManagement.LinkAlgorithmTrait.xml | |

| Relative Path | File | Description |
|---------------|--|-------------|
| | InfoWorld.EIS.DTOGenericService.LinkAlgorithmManagement.LinkAlgorithmTraits.xml | |
| | InfoWorld.EIS.DTOGenericService.LinkAlgorithmManagement.Match.xml | |
| | InfoWorld.EIS.DTOGenericService.QueryFunctions.DTOConflictingEntities.xml | |
| | InfoWorld.EIS.DTOGenericService.QueryFunctions.DTOFindEntity.xml | |
| | InfoWorld.EIS.DTOGenericService.QueryFunctions.DTOGetAllInfoPar.xml | |
| | InfoWorld.EIS.DTOGenericService.QueryFunctions.DTOGetAllInformationForAnEntity.xml | |
| | InfoWorld.EIS.DTOGenericService.QueryFunctions.DTOGetSupportedDomains.xml | |
| | InfoWorld.EIS.DTOGenericService.QueryFunctions.DTOLinkedEntities.xml | |
| | InfoWorld.EIS.DTOHL7Service.Address.xml | |
| | InfoWorld.EIS.DTOHL7Service.Container.xml | |
| | InfoWorld.EIS.DTOHL7Service.ContainerFiltr.xml | |
| | InfoWorld.EIS.DTOHL7Service.ContainerInfo.xml | |
| | InfoWorld.EIS.DTOHL7Service.Device.xml | |
| | InfoWorld.EIS.DTOHL7Service.DeviceFiltr.xml | |
| | InfoWorld.EIS.DTOHL7Service.DeviceInfo.xml | |
| | InfoWorld.EIS.DTOHL7Service.ManufacturedMaterial.xml | |
| | InfoWorld.EIS.DTOHL7Service.ManufacturedMaterialFiltr.xml | |
| | InfoWorld.EIS.DTOHL7Service.ManufacturedMaterialInfo.xml | |
| | InfoWorld.EIS.DTOHL7Service.Material.xml | |
| | InfoWorld.EIS.DTOHL7Service.MaterialFiltr.xml | |
| | InfoWorld.EIS.DTOHL7Service.MaterialInfo.xml | |
| | InfoWorld.EIS.DTOHL7Service.NonPersonLivingSubject.xml | |
| | InfoWorld.EIS.DTOHL7Service.NonPersonLivingSubjectFiltr.xml | |
| | InfoWorld.EIS.DTOHL7Service.NonPersonLivingSubjectInfo.xml | |

| Relative Path | File | Description |
|---------------|---|-------------|
| | InfoWorld.EIS.DTOHL7Service.Organization.xml | |
| | InfoWorld.EIS.DTOHL7Service.OrganizationFiltr.xml | |
| | InfoWorld.EIS.DTOHL7Service.OrganizationInfo.xml | |
| | InfoWorld.EIS.DTOHL7Service.Person.xml | |
| | InfoWorld.EIS.DTOHL7Service.PersonFiltr.xml | |
| | InfoWorld.EIS.DTOHL7Service.PersonInfo.xml | |
| | InfoWorld.EIS.DTOHL7Service.Place.xml | |
| | InfoWorld.EIS.DTOHL7Service.PlaceFiltr.xml | |
| | InfoWorld.EIS.DTOHL7Service.PlaceInfo.xml | |
| | InfoWorld.EIS.DTOHL7Service.Telecom.xml | |
| | InfoWorld.WSEventing.DTO.CustomSubscriptions.xml | |
| | InfoWorld.WSEventing.DTO.Endpoints.xml | |
| | InfoWorld.WSEventing.DTO.FilterDialects.xml | |
| | InfoWorld.WSEventing.DTO.Message.xml | |
| | InfoWorld.WSEventing.DTO.MessageGet.xml | |
| | InfoWorld.WSEventing.DTO.MessageGetDeliveryTo.xml | |
| | InfoWorld.WSEventing.DTO.Subscriptions.xml | |
| | ActionManager.dll | |
| | BindingExtensions.dll | |
| | CodingSystems.DAL.dll | |
| | Configuration.dll | |
| | connectionConfiguration.config | |
| | Connections.Common.dll | |
| | CTSEdit.dll | |
| | CTSEdit.Utils.dll | |
| | CTSEditBulk.dll | |
| | CTSEExport.dll | |

| Relative Path | File | Description |
|--------------------|---------------------------------|--------------------------|
| Services\EVS | CTSImport.dll | Binaries of EVS service. |
| | CTSImportProxy.dll | |
| | CTSService.Utils.dll | |
| | DTOCodingMappingEdit.dll | |
| | DTOMapping.dll | |
| | DTOMessageBrowser.dll | |
| | DTOMessageEdit.dll | |
| | DTOMessageRuntime.dll | |
| | DTOVocabularyEdit.dll | |
| | DTOVocabularyEdit.dll.config | |
| | EVSWrapper.dll | |
| | EVSWrapper.dll.config | |
| | Factory.dll | |
| | HL7DataTypes.XmlSerializers.dll | |
| | IContracts.dll | |
| | ICSharpCode.SharpZipLib.dll | |
| | ICTSEdit.dll | |
| ICTSEditBulk.dll | | |
| ICTSEditExport.dll | | |
| | ICTSImport.dll | |
| | IEventing.dll | |
| | MappingImpl.dll | |
| | Message.dll | |
| | MessageImpl.dll | |
| | MessageImpl.dll.config | |
| | MS.Caching.dll | |
| | Notify.dll | |
| | SecureChannel.dll | |
| | Security.Null.dll | |
| | securityConfiguration.config | |
| | VocabularyBrowser.DTO.dll | |
| | VocabularyImpl.dll | |

| Relative Path | File | Description |
|---------------------------|---|--|
| | VocabularyRuntime.DTO.dll | |
| | XamlContracts.dll | |
| | XamlDataContracts.dll | |
| | XamlImpl.dll | |
| Services\EVS\DBRepository | Connections.xml | XML mapping files which contains mapping definitions between ePractice datasets and SQL tables. The dataset is specified by setting the <MyDataSetInfo> tag. The table to interact with – specified through the <MyDataTable> tag – is defined by four commands – usually stored procedures – which represent the CRUD operations which can be performed on the table: select (Read), insert (Create), update (Update) and delete (Delete). Stored procedure parameters are passed from these datasets and mapped in the same XML file. Connections.xml file is used to set the connection string to BMS_EVS database. |
| | InfoWorld.EVS.CTSEdit.DTO.Association.xml | |
| | InfoWorld.EVS.CTSEdit.DTO.CodingSystem.xml | |
| | InfoWorld.EVS.CTSEdit.DTO.Concept.xml | |
| | InfoWorld.EVS.CTSEdit.DTO.ConceptAssociationsToCMultiAttrib.xml | |
| | InfoWorld.EVS.CTSEdit.DTO.ConceptProperty.xml | |
| | InfoWorld.EVS.CTSEdit.DTO.DSMap.xml | |
| | InfoWorld.EVS.CTSEdit.DTO.DSMapEntry.xml | |
| | InfoWorld.EVS.CTSEdit.DTO.DTORExpAndValueSet.xml | |
| | InfoWorld.EVS.CTSEdit.DTO.DTOValueSet.xml | |
| | InfoWorld.EVS.CTSEdit.DTO.DTOVocabularyDomain.xml | |
| | InfoWorld.EVS.CTSEdit.DTO.Relation.xml | |
| | InfoWorld.EVS.CTSEdit.DTO.ValueSets.xml | |
| | InfoWorld.EVS.CTSMAPI.DTO.CodeSystemInfo.xml | |
| | InfoWorld.EVS.CTSMAPI.DTO.DomainValueSetFiltr.xml | |
| | InfoWorld.EVS.CTSMAPI.DTO.DSConceptsByCode.xml | |
| | InfoWorld.EVS.CTSMAPI.DTO.DSConceptsByCodeProperties.xml | |
| | InfoWorld.EVS.CTSMAPI.DTO.DSConceptsByDesignation.xml | |
| | InfoWorld.EVS.CTSMAPI.DTO.DSConceptsByDesignationProperties.xml | |
| | InfoWorld.EVS.CTSMAPI.DTO.DSFullValueSetDescription.xml | |
| | InfoWorld.EVS.CTSMAPI.DTO.DSValueSetContextExpansion.xml | |
| | InfoWorld.EVS.CTSMAPI.DTO.DSValueSetExpansion.xml | |

| Relative Path | File | Description |
|---------------|---|-------------|
| | InfoWorld.EVS.CTSMAPI.DTO.DSValueSetExpansionProperties.xml | |
| | InfoWorld.EVS.CTSMAPI.DTO.DSValueSetExpansionReverse.xml | |
| | InfoWorld.EVS.CTSMAPI.DTO.DSVocabularyDomainDescription.xml | |
| | InfoWorld.EVS.CTSMAPI.DTO.GetFillInDetailsCD.xml | |
| | InfoWorld.EVS.CTSMAPI.DTO.IsCodeInValueSet.xml | |
| | InfoWorld.EVS.CTSMAPI.DTO.ValidateCode.xml | |
| | InfoWorld.EVS.CTSMAPI.DTO.ValueSetCodeReference.xml | |
| | InfoWorld.EVS.CTSMAPI.DTO.ValueSetFilter.xml | |
| | InfoWorld.EVS.CTSMAPI.DTO.VocabularyDomainFilter.xml | |
| | InfoWorld.EVS.CTSMMapping.DTO.DSMapConceptCode.xml | |
| | InfoWorld.EVS.CTSMMapping.DTO.DSMapEntry.xml | |
| | InfoWorld.EVS.CTSMMapping.DTO.DSSupportedMapsFilter.xml | |
| | InfoWorld.EVS.CTSVAPI.DTO.CodeSystem.xml | |
| | InfoWorld.EVS.CTSVAPI.DTO.CodeSystemFilter.xml | |
| | InfoWorld.EVS.CTSVAPI.DTO.CodingSchemeFilter.xml | |
| | InfoWorld.EVS.CTSVAPI.DTO.ConceptCodeValid.xml | |
| | InfoWorld.EVS.CTSVAPI.DTO.ConceptDescription.xml | |
| | InfoWorld.EVS.CTSVAPI.DTO.ConceptExpansion.xml | |
| | InfoWorld.EVS.CTSVAPI.DTO.ConceptProperties.xml | |
| | InfoWorld.EVS.CTSVAPI.DTO.ConceptsByDesignation.xml | |
| | InfoWorld.EVS.CTSVAPI.DTO.ConceptsByProperty.xml | |
| | InfoWorld.EVS.CTSVAPI.DTO.Designation.xml | |
| | InfoWorld.EVS.CTSVAPI.DTO.RelatedConcepts.xml | |
| | InfoWorld.EVS.DTOEditBulk.ConceptBulk.xml | |
| | InfoWorld.EVS.DTOEditBulk.ConceptPropertyBulk.xml | |

| Relative Path | File | Description |
|---------------|---|--------------------------|
| | InfoWorld.EVS.DTOEditBulk.RelationBulk.xml | |
| | InfoWorld.WSEventing.DTO.CustomSubscriptions.xml | |
| | InfoWorld.WSEventing.DTO.Endpoints.xml | |
| | InfoWorld.WSEventing.DTO.FilterDialects.xml | |
| | InfoWorld.WSEventing.DTO.Message.xml | |
| | InfoWorld.WSEventing.DTO.MessageGet.xml | |
| | InfoWorld.WSEventing.DTO.MessageGetDeliveryTo.xml | |
| | InfoWorld.WSEventing.DTO.Subscriptions.xml | |
| | XamlDataContracts.DSXamlReverse.xml | |
| | XamlDataContracts.RootXaml.xml | |
| | XamlDataContracts.XAMLFiltr.xml | |
| Services\PAP | ActionManager.dll | Binaries of PAP service. |
| | AuthorizationProxy.dll | |
| | Configuration.dll | |
| | connectionConfiguration.config | |

| Relative Path | File | Description |
|---------------|---|-------------|
| | Connections.Common.dll | |
| | Microsoft.ApplicationBlocks.Data.dll | |
| | Microsoft.ApplicationBlocks.ExceptionManagement.dll | |
| | Microsoft.ApplicationBlocks.ExceptionManagement.Interfaces.dll | |
| | Microsoft.Practices.EnterpriseLibrary.Common.dll | |
| | Microsoft.Practices.EnterpriseLibrary.ExceptionHandling.dll | |
| | Microsoft.Practices.EnterpriseLibrary.ExceptionHandling.Logging.dll | |
| | Microsoft.Practices.EnterpriseLibrary.Logging.dll | |
| | Microsoft.Practices.ObjectBuilder.dll | |
| | MS.Caching.dll | |
| | ObjectPickerHelper2.dll | |

| Relative Path | File | Description |
|---------------------------|---|--|
| | PAPProxy.dll | |
| | PDPSERVICEAuthorizationManager.dll | |
| | PolicyAdministrationPoint.dll | |
| | PolicyAdministrationPoint.dll.config | |
| | SecureChannel.dll | |
| | Security.Null.dll | |
| Services\PAP\DBRepository | Connections.xml | XML mapping files which contains mapping definitions between ePractice datasets and SQL tables. The dataset is specified by setting the <MyDataSetInfo> tag. The table to interact with – specified through the <MyDataTable> tag – is defined by four commands – usually stored procedures – which represent the CRUD operations which can be performed on the table: select (Read), insert (Create), update (Update) and delete (Delete). Stored procedure parameters are passed from these datasets and mapped in the same XML file. Connections.xml file is used to set the connection string to BMS_AURHZ database. |
| | InfoWorld.DE.DataAccess.LabSet.xml | |
| | InfoWorld.DE.DataAccess.LabSetId.xml | |
| | InfoWorld.DE.DataAccess.SentStatus.xml | |
| | InfoWorld.WSEventing.DTO.CustomSubscriptions.xml | |
| | InfoWorld.WSEventing.DTO.Endpoints.xml | |
| | InfoWorld.WSEventing.DTO.FilterDialects.xml | |
| | InfoWorld.WSEventing.DTO.Message.xml | |
| | InfoWorld.WSEventing.DTO.MessageGet.xml | |
| | InfoWorld.WSEventing.DTO.MessageGetDeliveryTo.xml | |
| | InfoWorld.WSEventing.DTO.Subscriptions.xml | |
| Services\PDP | PolicyDecisionPoint.dll | Binaries of PDP service. |
| | PolicyDecisionPoint.dll.config | |
| Services\RS | AuthorizationProxy.dll | Binaries of RS service. |
| | RS.Contracts.dll | |
| | RS.Proxy.dll | |
| | RS.ServiceImplementation.dll | |
| | RS.ServiceImplementation.dll.config | |
| | 7zip.dll | |
| | AdapterRepository.dll | |
| | AuditTrailSender.dll | |
| | AuthorizationSubscriber.dll | |
| | BindingExtensions.dll | |
| | Common.dll | |

| Relative Path | File | Description |
|------------------------|--------------------------------|---|
| Services\Shared | CommonResources.dll | Shared binaries by BMS Service and Win Service. |
| | Connections.SingleDatabase.dll | |
| | ContextWriter.dll | |
| | DataUtil.dll | |
| | General.MT.dll | |
| | HL7CDA.dll | |
| | HL7CMET.dll | |
| | HL7DataTypes.dll | |
| | ICSharpCode.SharpZipLib.dll | |
| | Infoworld.Configuration.dll | |
| | log4net.dll | |
| | MiddleTier.dll | |
| | MS.Common.dll | |
| | MS.Configuration.dll | |
| | MS.Connections.dll | |
| | MS.Security.dll | |
| Saml20.dll | | |
| SecurityTokenCache.dll | | |
| | Tracing.dll | |
| | WSEventing.dll | |
| | WSEventing.DataAccess.dll | |
| | WSEventing.DTO.dll | |
| | Xacml2.dll | |
| | XacmlCore.dll | |
| Services\STS | SecureTokenService.dll | Binaries of STS service. |
| | SecureTokenService.dll.config | |
| Services | WinServiceHost.exe | WinServiceHost files. |
| | WinServiceHost.exe.config | |
| | BMS-Services.log | |

Table 25-BMS Website Files

| Relative Path | File | Description |
|---------------|--|--|
| WebSite | CacheService.svc | The binaries of the BMS Web Site, web site configuration file. |
| | Global.asax | |
| | | |
| | packages.config | |
| | Web.config | |
| | WebTrace.log | |
| | additional_login_msg.txt | Dynamic text for main login page |
| WebSite\bin | AntiXSSLibrary.dll | Web site's binaries. |
| | AuditTrailSender.dll | |
| | AuthenticationProxy.dll | |
| | BMS.Contracts.dll | |
| | BMS.Facade.Contracts.dll | |
| | BMS.Facade.dll | |
| | BMS.PAPContracts.dll | |
| | BMS.Security.dll | |
| | BMS.ServicesWrapper.dll | |
| | BMS.Utils.dll | |
| | BMS.Web.dll | |
| | EISContracts.dll | |
| | HL7DataTypes.dll | |
| | HtmlAgilityPack.dll | |
| | HtmlSanitizationLibrary.dll | |
| | IContracts.dll | |
| | ICTSEdit.dll | |
| | Infoworld.Configuration.dll | |
| | log4net.dll | |
| | log4netAsync.dll | |
| | Microsoft.ReportViewer.Common.dll | |
| | Microsoft.ReportViewer.DataVisualization.dll | |
| | Microsoft.ReportViewer.ProcessingObjectModel.dll | |
| | Microsoft.ReportViewer.WebForms.dll | |
| | Microsoft.Web.Infrastructure.dll | |
| | Microsoft.Web.Mvc.dll | |
| | RS.Contracts.dll | |

| Relative Path | File | Description |
|-----------------------------------|------------------------------------|---|
| | SamI20.dll | |
| | SecurityTokenCache.dll | |
| | System.Web.Helpers.dll | |
| | System.Web.Mvc.dll | |
| | System.Web.Razor.dll | |
| | System.Web.WebPages.Deployment.dll | |
| | System.Web.WebPages.dll | |
| | System.Web.WebPages.Razor.dll | |
| | Tracing.dll | |
| | Xacml2.dll | |
| | XacmlCore.dll | |
| WebSite\bin\LocalReportWhiteboard | WardWhitebord.rdlc | Ward Whiteboard report file. |
| WebSite\bin\Scripts | Conditional-validation.js | File used by the site for conditional validation. |
| WebSite\Content | bundleCss.chirp.config | Images, themes and styles. |
| | Controls.css | |
| | LayoutCss.min.css | |
| | LayoutVistaIntegrationCss.min.css | |
| | Reports.min.css | |
| | Site.css | |
| WebSite\Content\images | add_tab_24.png | Images used by site. |
| | arrow_down.png | |
| | arrow_up.png | |
| | BMSLogoV6.jpg | |
| | check_inv.png | |
| | edit_staff_cancel.png | |
| | edit_staff_save.png | |
| | FavIcon.ico | |
| | Info.png | |
| | Ladybug.png | |
| | login_logo.png | |
| | logo.png | |
| | order_down.png | |
| | order_up.png | |
| | sort_down.png | |
| | sort_up.png | |
| WebSite\Content\themes\base | jquery.ui.accordion.css | jQuery controls style-sheets files. |
| | jquery.ui.all.css | |
| | jquery.ui.autocomplete.css | |
| | jquery.ui.base.css | |

| Relative Path | File | Description |
|---------------------------------------|--|-------------------------|
| | jquery.ui.button.css | |
| | jquery.ui.core.css | |
| | jquery.ui.datepicker.css | |
| | jquery.ui.dialog.css | |
| | jquery.ui.progressbar.css | |
| | jquery.ui.resizable.css | |
| | jquery.ui.selectable.css | |
| | jquery.ui.slider.css | |
| | jquery.ui.tabs.css | |
| | jquery.ui.theme.css | |
| WebSite\Content\themes\base images | ui-bg_flat_0_aaaaaa_40x100.png | Images |
| | ui-bg_flat_75_ffffff_40x100.png | |
| | ui-bg_glass_55_fbf9ee_1x400.png | |
| | ui-bg_glass_65_ffffff_1x400.png | |
| | ui-bg_glass_75_dadada_1x400.png | |
| | ui-bg_glass_75_e6e6e6_1x400.png | |
| | ui-bg_glass_95_fef1ec_1x400.png | |
| | ui-bg_highlight-soft_75_cccccc_1x100.png | |
| | ui-icons_222222_256x240.png | |
| | ui-icons_2e83ff_256x240.png | |
| | ui-icons_454545_256x240.png | |
| | ui-icons_888888_256x240.png | |
| | ui-icons_cd0a0a_256x240.png | |
| WebSite\Reporting | EvacuationPatientReportViewer.aspx | Report Viewer pages. |
| | LocalReportViewer.aspx | |
| | ReportError.aspx | |
| | ReportViewer.aspx | |
| WebSite\ ReportsLocal | BedStatusReport.rdlc | Bed Status Report file. |
| WebSite\Scripts | antiForgeryToken.js | JavaScript files. |
| | bundleScripts.chirp.config | |
| | conditional-validation.js | |
| | element-change.js | |
| | hoverIntent.js | |
| | jquery.autosize.js | |
| | jquery.base64.js | |
| | jquery.base64.min.js | |
| | jquery.jscrollpane.min.js | |
| | jquery.maskedinput-1.3.min.js | |
| | jquery.mousewheel.js | |
| | jquery.tablescroll.js | |
| | jquery.tablescroll.min.js | |
| | jquery.tablesorter.js | |
| | jquery.tablesorter.min.js | |
| | jquery.ui.autocomplete.js | |

| Relative Path | File | Description |
|-----------------------|---|-------------------------------------|
| | jquery.ui.core.js | |
| | jquery.ui.position.js | |
| | jquery.ui.progressbar.js | |
| | jquery.ui.widget.js | |
| | jquery.unobtrusive-ajax.js | |
| | jquery.unobtrusive-ajax.min.js | |
| | jquery.validate.js | |
| | jquery.validate.min.js | |
| | jquery.validate.unobtrusive.js | |
| | jquery.validate.unobtrusive.min.js | |
| | jquery.validate-vsdoc.js | |
| | jquery-1.5.1.js | |
| | jquery-1.5.1.min.js | |
| | jquery-1.5.1-vsdoc.js | |
| | jquery-1.7.1.js | |
| | jquery-1.7.1.min.js | |
| | jquery-ui-1.8.11.js | |
| | jquery-ui-1.8.11.min.js | |
| | jquery-ui-1.8.18.custom.js | |
| | json2.js | |
| | LayoutAdminAutoCompleteAndDatePicker.js | |
| | LayoutAdminScripts.min.js | |
| | LayoutAutoCompleteAndDatePicker.js | |
| | LayoutScripts.min.js | |
| | LayoutVistaIntegrationDatePicker.js | |
| | LayoutVistaIntegrationScripts.min.js | |
| | MicrosoftAjax.debug.js | |
| | MicrosoftAjax.js | |
| | MicrosoftMvcAjax.debug.js | |
| | MicrosoftMvcAjax.js | |
| | MicrosoftMvcValidation.debug.js | |
| | MicrosoftMvcValidation.js | |
| | modernizr-1.7.js | |
| | modernizr-1.7.min.js | |
| | Reports.min.js | |
| | superfish.js | |
| | supersubs.js | |
| | whiteboard-script.js | |
| | whiteboard-script.min.js | |
| WebSite\Views | _ViewStart.cshtml | User Interface views. |
| | Web.config | |
| WebSite\Views\Account | LogOff.cshtml | Login/Logout user interface views. |
| | LogOn.cshtml | |
| WebSite\Views\Admin | AddEditUser.cshtml | Admin section user interface views. |
| | AddUserOperations.cshtml | |

| Relative Path | File | Description |
|---|---------------------------------------|---|
| | CacheConfirmation.cshtml | |
| | FacilityEdit.cshtml | |
| | FacilityEditSaved.cshtml | |
| | Index.cshtml | |
| | RefreshUsersConfirmation.cshtml | |
| | RemoveUserOperations.cshtml | |
| | SelectUser.cshtml | |
| | SisterSiteAddEdit.cshtml | |
| | SisterSiteEditSaved.cshtml | |
| | UserEditHasSaved.cshtml | |
| | UserOperationsView.cshtml | |
| WebSite\Views\AdminSpecialtyAssociation | Delete.cshtml | Admin specialty association user interface views. |
| | Index.cshtml | |
| WebSite\Views\AdminUnavailableReason | AddConfirmation.cshtml | Admin unavailable reason user interface |
| | Delete.cshtml | |
| | DeleteConfirmation.cshtml | |
| | Edit.cshtml | |
| | EditConfirmation.cshtml | |
| | Index.cshtml | |
| | MissingUnavailableReasonText.cshtml | |
| | UnavailableReasonAlreadyExists.cshtml | |
| | UnavailableReasonList.cshtml | |
| WebSite\Views\AdminComments | Index.cshtml | |
| | NotifyChange.cshtml | |
| WebSite\Views\AdminWaitingArea | AddAction.cshtml | Admin waiting area user interface views. |
| | Delete.cshtml | |
| | DeleteAction.cshtml | |
| | Edit.cshtml | |
| | EditAction.cshtml | |
| | Index.cshtml | |
| WebSite\Views\AdminWhiteboardReport | Delete.cshtml | Admin whiteboard report user interface |
| | Edit.cshtml | |
| | Index.cshtml | |
| WebSite\Views\AdtOrderableItems | Confirmation.cshtml | ADT Orderable Items user interface views. |
| | Index.cshtml | |
| | OrderableItemsList.cshtml | |
| WebSite\Views\BackgroundProcessors | AddEditConfirmation.cshtml | Background Processors user interface views. |
| | DeleteConfirmation.cshtml | |
| | Index.cshtml | |
| WebSite\Views\BedBoard | Index.cshtml | VISN user interface views. |
| WebSite\Views\BedBoardModule | Index.cshtml | Bed Board Module user |

| Relative Path | File | Description |
|-----------------------------------|----------------------------|---|
| | | interface view. |
| WebSite\Views\BedInformation | ClearAll.cshtml | Bed Information user interface views. |
| | Index.cshtml | |
| | NotifyChange.cshtml | |
| WebSite\Views\BedStatusReport | Index.cshtml | Patients Pending Placement Status report user interface view. |
| WebSite\Views\ContingencySettings | Confirmation.cshtml | Contingency settings user interface views. |
| | Index.cshtml | |
| WebSite\Views\DischargeClinic | Index.cshtml | Discharge clinic user interface views. |
| | MessageConfirmation.cshtml | |
| WebSite\Views\EmsBedStatusAdmin | Edit.cshtml | EMS bed status user interface views |
| | EMSBatchAssign.cshtml | |
| | Index.cshtml | |
| | SaveConfirmation.cshtml | |
| WebSite\Views\EMSMobile | EMSList.cshtml | EMS Mobile user interface views. |
| | Users.cshtml | |
| WebSite\Views\EMSMobileLogon | Index.cshtml | EMS Mobile Logon user interface view. |
| WebSite\Views\EmsNotification | AddEdit.cshtml | EMS Notification user interface views. |
| | AddEditAction.cshtml | |
| | Delete.cshtml | |
| | DeleteAction.cshtml | |
| | Index.cshtml | |
| WebSite\Views\EmsStaff | Delete.cshtml | EMS Staff user interface views. |
| | Edit.cshtml | |
| | Index.cshtml | |
| WebSite\Views\EventNotification | AddConfirmation.cshtml | Event Notification user interface views |
| | AddEdit.cshtml | |
| | Delete.cshtml | |
| | DeleteConfirmation.cshtml | |
| | EditConfirmation.cshtml | |
| | Index.cshtml | |
| WebSite\Views\Exception | Index.cshtml | Exception user interface views. |
| | WFException.cshtml | |
| WebSite\Views\FacilityDiversion | Add.cshtml | Facility Diversion user interface views. |
| | Confirmation.cshtml | |
| | Edit.cshtml | |
| | Index.cshtml | |
| WebSite\Views\FacilitySettings | Index.cshtml | Facility Settings user interface views. |
| | SaveConfirmation.cshtml | |

| Relative Path | File | Description |
|-----------------------------------|------------------------------------|---------------------------------------|
| WebSite\Views\Home | AdmissionList.cshtml | Home user interface views. |
| | AdmissionSuccessRemove.cshtml | |
| | AdmissionSuccessUndoRemove.cshtml | |
| | ChangeIntegratedSiteError.cshtml | |
| | Edit.cshtml | |
| | FeeUtilizationAdmissionList.cshtml | |
| | Index.cshtml | |
| | PatientFlowAdmissionList.cshtml | |
| | PatientInHouseAdmissionList.cshtml | |
| | PatientInquiry.cshtml | |
| | RemoveAdmission.cshtml | |
| | StandardAdmissionList.cshtml | |
| | UndoRemoveAdmission.cshtml | |
| WebSite\Views\IconLegend | Index.cshtml | Icon Legend user interface view. |
| WebSite\Views\IconLibrary | Edit.cshtml | Icon Library user interface views. |
| | Index.cshtml | |
| | ResetConfirmation.cshtml | |
| | SaveConfirmation.cshtml | |
| WebSite\Views\Information | Index.cshtml | Information user interface view. |
| WebSite\Views\LogOff | Index.cshtml | LogOff user interface view. |
| WebSite\Views\MaintainMarquee | Index.cshtml | Maintain Marquee user interface view. |
| | Saved.cshtml | |
| WebSite\Views\NationalAndRegional | Index.cshtml | National user interface views. |
| | PatientListView.cshtml | |
| WebSite\Views\NewEvents | Index.cshtml | New events user interface view. |
| WebSite\Views\Numi | Delete.cshtml | NUMI user interface views. |
| | Edit.cshtml | |
| | Index.cshtml | |
| WebSite\Views\Patient | Admission.cshtml | Patient user interface views. |
| | Confirmation.cshtml | |
| | EvacuationData.cshtml | |
| | GenericWfFault.cshtml | |
| | PatientWaitingAdd.cshtml | |
| | Select.cshtml | |
| WebSite\Views\Reports | Index.cshtml | Patient user interface views. |
| WebSite\Views\Shared | _Layout.cshtml | Shared user interface |

| Relative Path | File | Description |
|---------------------------------|---------------------------------------|--|
| | | views. |
| | _LayoutAdminPages.cshtml | |
| | _VistaIntegrationLayout.cshtml | |
| | CustomWebViewPage.cs | |
| | Error.cshtml | |
| | Header.cshtml | |
| | HtmlHelpers.cs | |
| | RequiredIfHelpers.cs | |
| WebSite\Views\SiteList | Index.cshtml | Site list user interface view. |
| WebSite\Views\SiteOptions | EvacuationConfirmation.cshtml | Site options user interface views. |
| | Index.cshtml | |
| WebSite\Views\Transfer | AddEditResult.cshtml | |
| | AddTransfer.cshtml | |
| | EditTransfer.cshtml | |
| | FinalizeResult.cshtml | |
| | Index.cshtml | |
| WebSite\Views\Unauthorized | PermissionAuth.cshtml | Unauthorized user interface view. |
| WebSite\Views\UserConfiguration | Index.cshtml | User configuration views. |
| | SelectUser.cshtml | |
| | UserEditHasSaved.cshtml | |
| WebSite\Views\UnavailableReason | AddConfirmation.cshtml | Unavailable reason user interface views. |
| | Delete.cshtml | |
| | DeleteConfirmation.cshtml | |
| | Edit.cshtml | |
| | EditConfirmation.cshtml | |
| | Index.cshtml | |
| | MissingUnavailableReasonText.cshtml | |
| | UnavailableReasonAlreadyExists.cshtml | |
| | UnavailableReasonList.cshtml | |
| WebSite\Views\VistaIntegration | Audit.cshtml | Vista integration user interface views. |
| | AuditLogEntries.cshtml | |
| | Categories.cshtml | |
| | DeleteScheduler.cshtml | |
| | EditScheduler.cshtml | |
| | EditVistaSite.cshtml | |
| | ErrorDetail.cshtml | |
| | Index.cshtml | |
| | Schedulers.cshtml | |
| | VistaSites.cshtml | |
| WebSite\Views\WaitingArea | AddAction.cshtml | |
| | Delete.cshtml | |
| | DeleteAction.cshtml | |

| Relative Path | File | Description |
|---------------------------------|--------------------------------|--|
| | Edit.cshtml | |
| | EditAction.cshtml | |
| | Index.cshtml | |
| WebSite\Views\WardConfiguration | AddEditWardConfirmation.cshtml | Ward configuration user interface views. |
| | Delete.cshtml | |
| | DeleteConfirmation.cshtml | |
| | Index.cshtml | |
| | Wards.cshtml | |
| WebSite\Views\WardOccupancy | Index.cshtml | Ward occupancy user interface view. |
| WebSite\Views\WardWhiteboard | ClearAll.cshtml | Ward whiteboard user interface views. |
| | Edit.cshtml | |
| | Index.cshtml | |
| | NotifyChange.cshtml | |
| | WardWhiteBoard.cshtml | |
| | WhiteboardDataOne.cshtml | |
| | WhiteboardDataTwo.cshtml | |
| WebSite\Views\WardWhiteboardUrl | Index.cshtml | Ward whiteboard url user interface view. |
| WebSite\Views\WhiteboardStaff | Index.cshtml | Whiteboard staff user interface view. |
| WebSite\Views_ViewStart.cshtml | _ViewStart.cshtml | |
| | | |

Table 26-Policy Manager Files

| Relative Path | File | Description |
|-------------------------------|--|---------------------------------------|
| Consoles\PolicyManager | 7zip.dll | Binaries of PolicyManager application |
| | AdapterRepository.dll | |
| | AuditTrailSender.dll | |
| | Infoworld.Configuration.dll | |
| | MS.Common.dll | |
| | MS.Configuration.dll | |
| | MS.Connections.dll | |
| | PAPPProxy.dll | |
| | PolicyEditor.dll | |
| | PolicyEditor.dll.config | |
| | PolicyManager.exe | |
| | PolicyManager.exe.config | |
| | ResourceSecurityProperties.dll | |
| | SecurityTokenCache.dll | |
| | WSEventing.dll | |
| WSEventing.DataAccess.dll | | |
| WSEventing.DTO.dll | | |
| Consoles\PolicyManager\ ro | PolicyEditor.resources.dll | Binaries used by Policy Manager. |
| | ResourceSecurityProperties.resources.dll | |
| Consoles\PolicyManager\ ro-RO | PolicyEditor.resources.dll | Binaries used by Policy Manager. |
| | ResourceSecurityProperties.resources.dll | |

4 Archiving

All the sensitive data in the BMS solution is persisted in a collection of SQL Server Databases. Therefore the archiving process is implying the definition of maintenance plans that will regularly make backups of these databases, backups that can be restored if needed.

The maintenance plan can be defined as detailed in the following pictures:

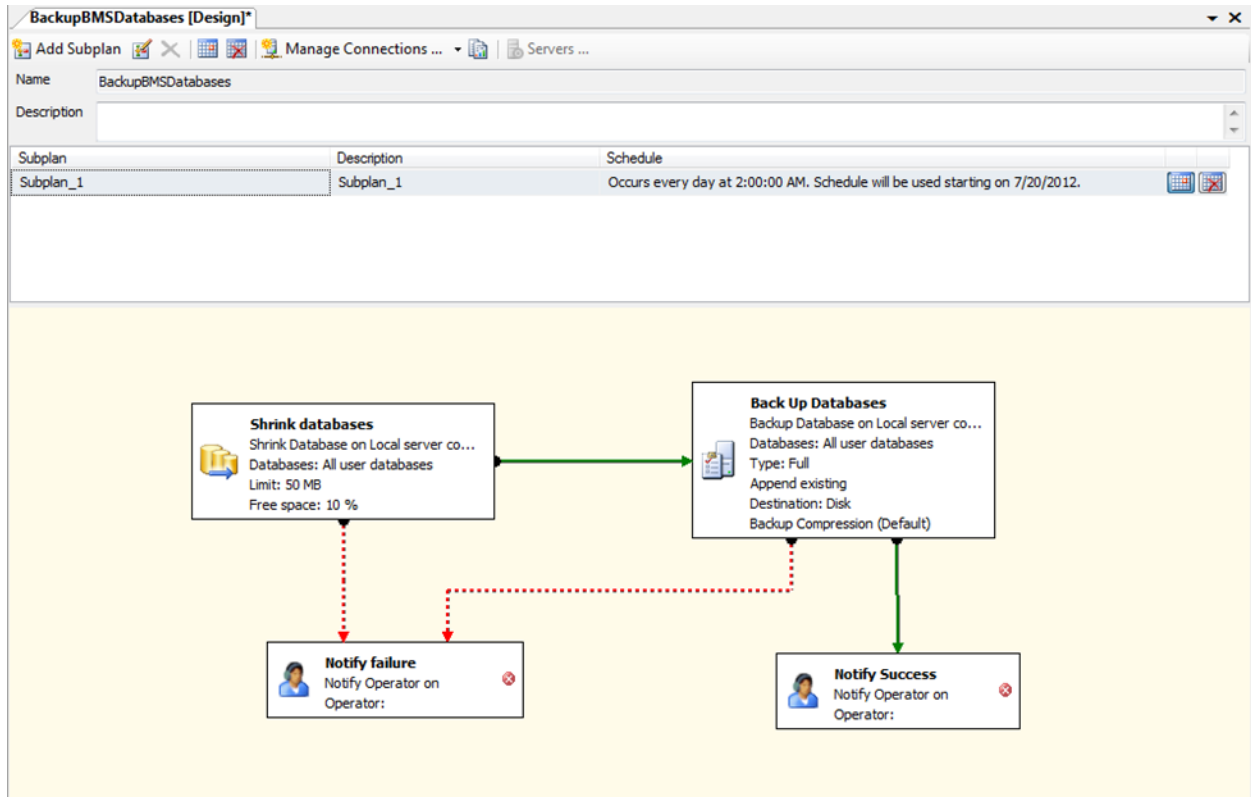


Figure 74-Backup Maintenance Plan

5 External Relationships

External relationships can be referenced from [External Interfaces](#) in the next section.

6 External Interfaces

VistA and NUMI are the external interfaces that are connected with the BMS system (see screenshot below):

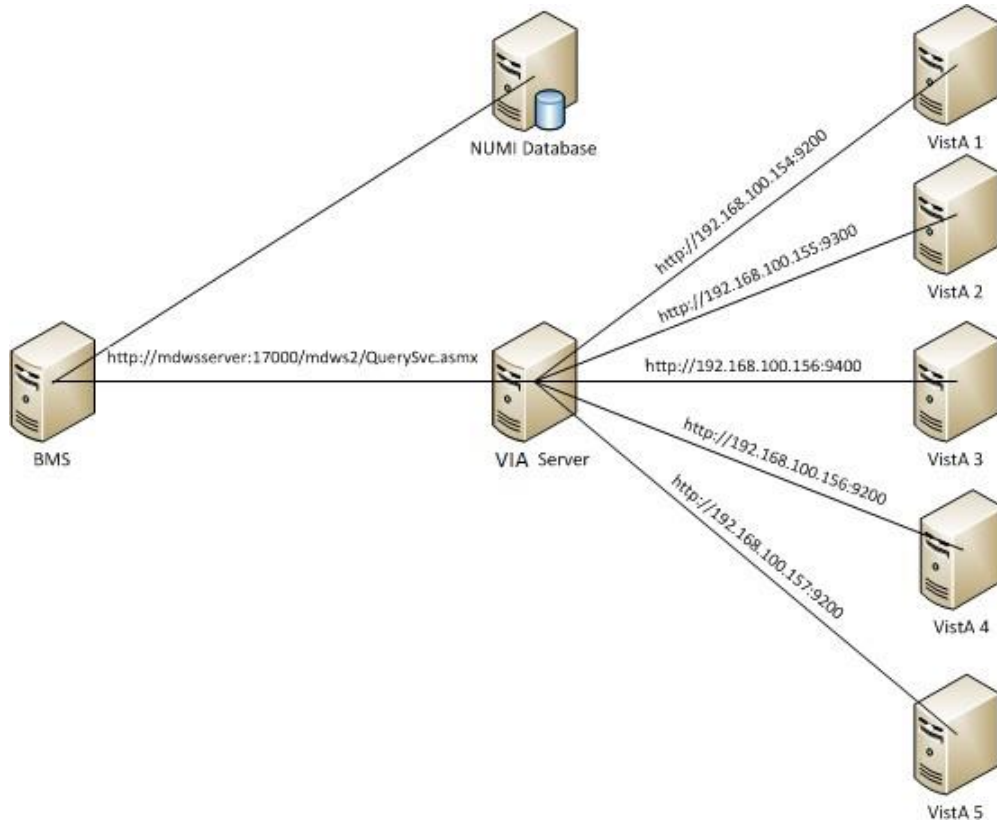


Figure 75-BMS Exnternal Interfaces

- All the VISTA deployments will be connected through VIA which has replaced MDWS. In order to connect to VIA, BMS service configuration file (BMS.ServiceHost.exe.config) should be changed as follow, see Table 4 – BMS ServiceHost Configuration Parameter section:

| | | |
|--------------------|---|---|
| ViaEndpointUrl | value="https://REDACTED.via.va.gov/via-webservices/services/BackgroundProcessService" | value="https://REDACTED.via.va.gov/via-webservices/services/BackgroundProcessService" |
| ViaRequestingApp | value="BMSBatch" | value="BMSBatch" |
| ViaAppToken | value="BMSB_ID577" | value="BMSB_ID577" |
| ViaAppPassword | value="*****" | Value="*****" |
| MinimumFilemanDate | Value="01/01/1992" | Value="01/01/1992" |

- NUMI - A connection string to NUMI database needs to be set in service configuration file (BMS.ServiceHost.exe.config), see **Table 4 - BMS ServiceHost Configuration Parameters** section:

```
<ConnectionString>Data Source=numiserver;Initial Catalog=NUMI;Integrated Security=True;</ConnectionString>.
```

NOTE: All the configurations described above are using dummy servers and ports. Real deployment should use appropriate server, port and database connection strings.

7 Software Security

BMS Security is implemented at two levels:

- The first level of security consists in deciding which users have access to what pages (National/Regional, VISN, facility, EMS page).
- The second level of security refers to the read/write permissions (which are the pages a user can edit/update).

Both levels of security are implemented by means of the Policy Manager application described in the next section.

An additional level of security is provided by the domain restrictions: users can access only the BMS pages within the domain where they have been granted access rights.

The security services are based on well-established standards and practices such as:

- LDAP protocol;
- WS-Security specification;
- X509 certificates.

These services are in charge of providing for the following ‘functionalities’:

- CIA:
 - Confidentiality – encrypted message.
 - Integrity – message hasn’t been tampered.
 - Authentication – prove identity.
- Authorization – role based access.
- Accountability – audit trail.
- Policies – mutually agreed by involved parties.

From the client application perspective, the security services are in charge of:

- Authentication:
 - SAML assertions verified by the called service.

- Role based authorization:
 - o Roles stored in LDAP.
 - o Policies defined using XACML language.
- Record level authorization.
- Audit trail.

The audit services provide the means to address the issues of liability management, asset protection and quality of service. To facilitate a timely response to policy violations, security incidents or infrastructure and application failures, InFlow will support monitoring, logging, analysing, and reporting on every level of its architecture.

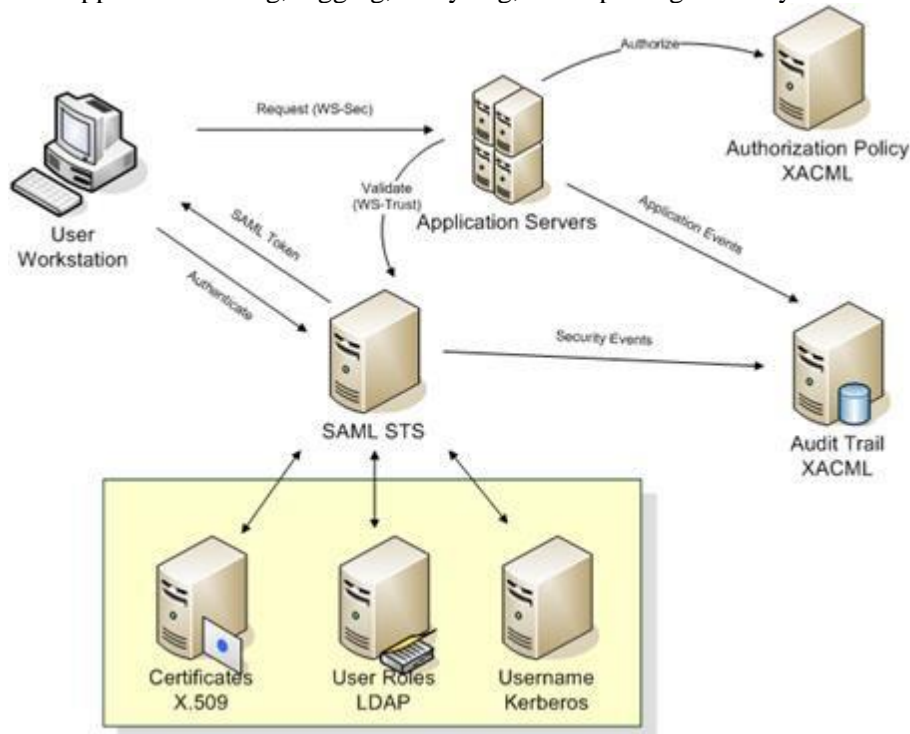


Figure 76-Security Services Architecture

The security services consist of the authentication part: STS – security token service and authorization part: PAP – policy administration point and PDP – policy decision point.

7.1 Policy Manager

From the Console folder of your BMS solution, select Policy Manager and then double-click the PolicyManager.exe file to display the following dialog window:

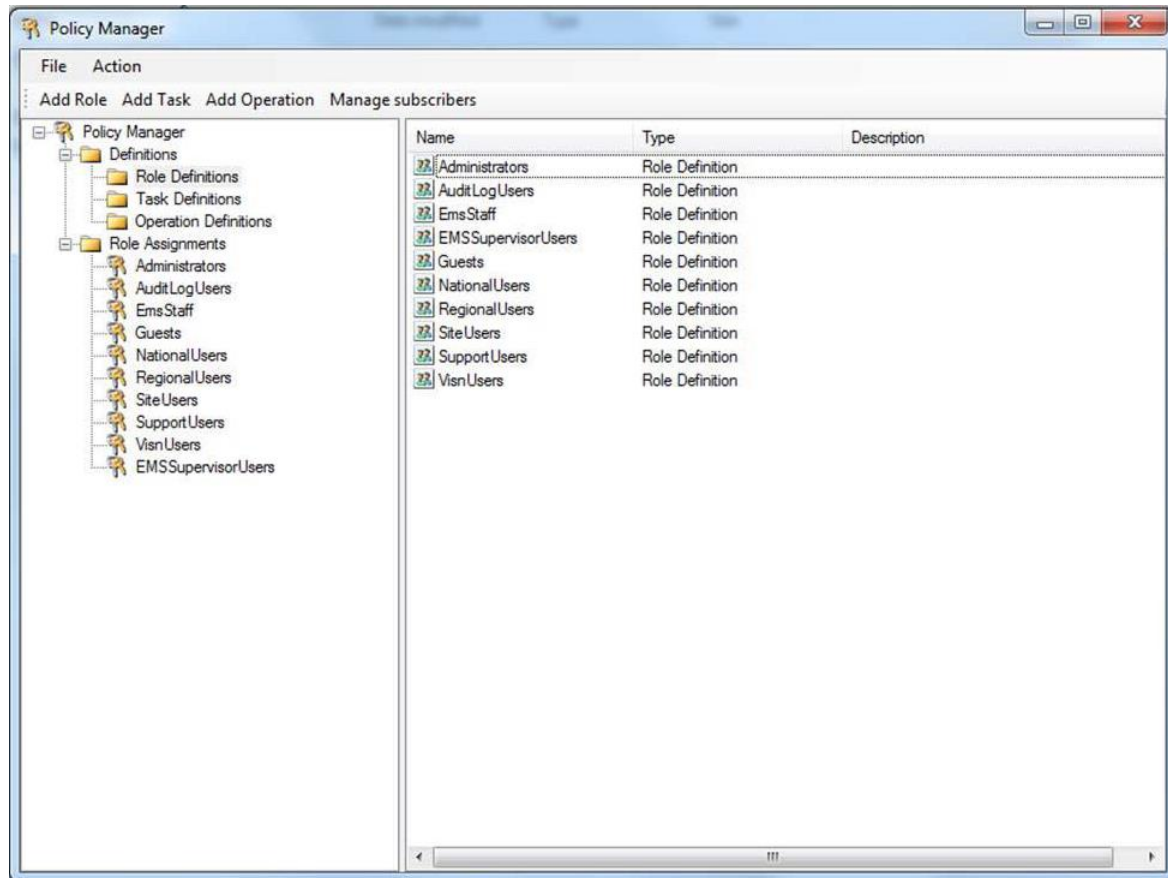


Figure 77-Policy Manager Main Window

The Definitions folder in the left hand panel contains the definitions of the roles, tasks and operations valid within the BMS application.

The Role Definitions folder contains the list of user roles defined within BMS.

The Task Definitions folder contains the list of tasks that can be performed within BMS and their corresponding definitions. A task usually requires the completion of several operations.

The Operation Definitions folder contains the list of operations that can be performed within BMS and their corresponding definitions.

7.2 Operation Definitions

To view the definition of an operation select Operation definitions from the left-hand panel of the main Policy Manager window and double-click the operation to display the following dialog window:

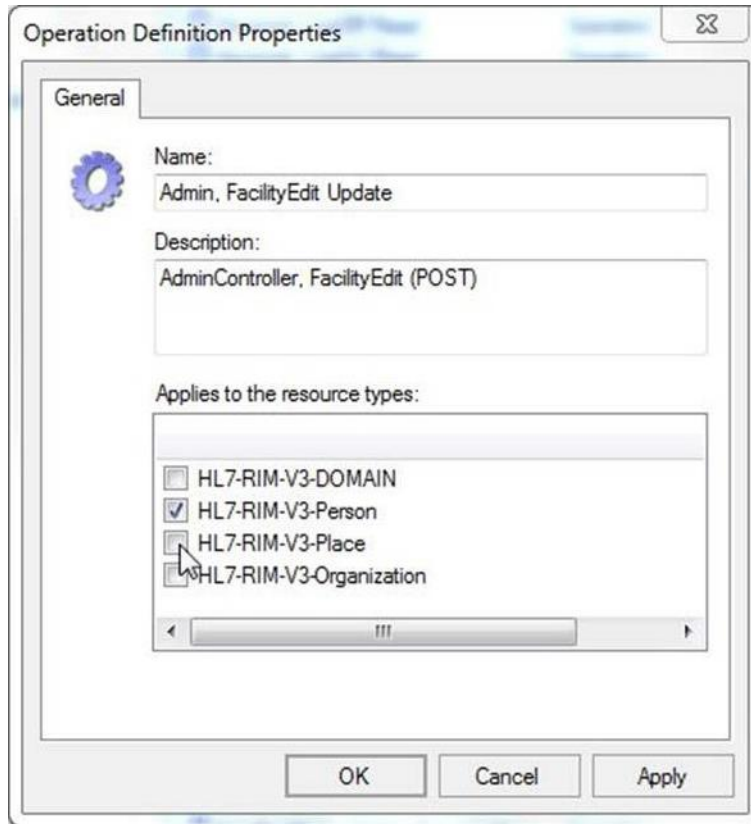


Figure 78-Operation Definition

A list with all the operations of BMS application is presented below:

Table 27-BMS Operations

| Operation Name | Operation Description |
|-------------------------------|--|
| Admin, AddEditUser Read | 'Add/Edit BMS User' hyperlink from the Administration section's menu. |
| Admin, FacilityEdit Read | 'Edit BMS Site' hyperlink from the Administration section's menu. |
| Admin, Index Read | 'BMS Admin' hyperlink from the National And Regional Page. |
| Operation Name | Operation Description |
| Admin, SelectUser Read | 'Select Existing NT User Name' button from the ADMINISTRATION SECTION - USERADD/EDIT page. |
| Admin, SisterSiteAddEdit Read | 'Edit Sister Sites' hyperlink from the Administration section's menu. |
| Admin, AddUserOperations Read | 'Add User' button from the ADMINISTRATION SECTION - FACILITY EDIT page (Edit BMS Site submenu). |
| Admin, RemoveUsers Read | 'Remove Selected' button from the ADMINISTRATION SECTION - FACILITY EDIT page (Edit BMS Site submenu). |
| Admin, SearchUser Read | 'Find' button from the 'Select user' page ('Select Existing NT User Name' button from the Administration Section menu, 'Add/Edit BMS User' submenu). |
| Admin, SearchUsers Read | 'Find' button from the ADMINISTRATION SECTION - FACILITY EDIT page (Edit BMS Site submenu). |

| | |
|--|---|
| Admin, ClearCache Read | 'Clear Cache' link from the Administration section's menu. |
| Admin, AddEditUser Update | 'Submit' button from the ADMINISTRATION SECTION - USERADD/EDIT page. |
| Admin, FacilityEdit Update | 'Submit' button from Administration section's menu 'Edit BMS Site' hyperlink (page ADMINISTRATION SECTION - FACILITY EDIT). |
| Admin, SisterSiteAddEdit Update | 'Edit Sister Sites' hyperlink from the Administration section's menu, 'Submit' button. |
| Admin, AddUserOperations Update | 'Add' button from Add users page (Add User button from the Facility page). |
| Admin, RemoveUserOperations Update | 'Remove Selected' button from the ADMINISTRATION SECTION - FACILITY EDIT page (Edit BMS Site submenu). |
| AdminComments, Delete Read | 'Delete' hyperlink from the Common Medical Terms page. |
| AdminComments, Edit Read | 'Edit' hyperlink from the Common Medical Terms page. |
| AdminComments, Index Read | 'Common Medical Terms' hyperlink from the Administration section's menu. |
| AdminComments, Index Update | 'Save' button from the Common Medical Terms page. |
| AdminIcon, Delete Read | 'Delete Icon' button on ADMINISTRATION SECTION - EDIT ICON page (Add/Edit Icon Submenu) |
| AdminIcon, Edit Read | 'Edit' Link on ADMINISTRATION SECTION - ICON ADD/EDIT page (Add/Edit Icon Submenu) |
| AdminIcon, Index Read | 'Add/Edit Icon' link on ADMINISTRATION SECTION |
| AdminIcon, Search Read | 'Search' Link on ADMINISTRATION SECTION - ICON ADD/EDIT page (Add/Edit Icon Submenu) |
| AdminIcon, ViewIconReport Read | 'Report' Link on ADMINISTRATION SECTION - ICON ADD/EDIT page (Add/Edit Icon Submenu) |
| AdminIcon, Delete Update | 'Remove' button on ADMINISTRATION SECTION - DELETE ICON page (Add/Edit Icon Submenu) |
| AdminIcon, Edit Update | 'Save' button on ADMINISTRATION SECTION - EDIT ICON page (Add/Edit Icon Submenu) |
| AdminIcon, Index Update | 'Up/Down arrow' buttons on ADMINISTRATION SECTION - ICON ADD/EDIT page (Add/Edit Icon Submenu) |
| AdminSpecialtyAssociation, Delete Read | 'Delete' Link on ADMINISTRATION SECTION - Treating Specialty/NUMA/HAvBED Edit page (Treating Specialty/NUMA/HAvBED Submenu) |
| AdminSpecialtyAssociation, Index Read | 'Treating Specialty/NUMA/HAvBED' Link on ADMINISTRATION SECTION |

| Operation Name | Operation Description |
|--|---|
| AdminSpecialtyAssociation, Delete Update | 'Delete' Button on ADMINISTRATION SECTION - Treating Specialty/NUMA/HAvBED Delete page (Treating Specialty/NUMA/HAvBED Submenu) |
| AdminSpecialtyAssociation, Index Update | 'Save' Button on ADMINISTRATION SECTION - Treating Specialty/NUMA/HAvBED Edit page (Treating Specialty/NUMA/HAvBED Submenu) |
| AdminUnavailableReason, Delete Read | 'Delete' link on ADMINISTRATION SECTION - National Unavailable Reason page (National Unavailable Reason Submenu) |
| AdminUnavailableReason, Edit Read | 'Edit' link on ADMINISTRATION SECTION - National Unavailable Reason page (National Unavailable Reason Submenu) |
| AdminUnavailableReason, Index Read | 'National Unavailable Reason' Link on ADMINISTRATION SECTION |

| | |
|---------------------------------------|--|
| AdminUnavailableReason, Delete Update | 'Delete Record' button on ADMINISTRATION SECTION - National Unavailable Reason Delete page (National Unavailable Reason Submenu) |
| AdminUnavailableReason, Edit Update | 'Submit' button on ADMINISTRATION SECTION - National Unavailable Reason Edit page (National Unavailable Reason Submenu) |
| AdminUnavailableReason, Index Update | 'Add' button on ADMINISTRATION SECTION - National Unavailable Reason page (National Unavailable Reason Submenu) |
| AdminWaitingArea, Delete Read | 'Delete' link on ADMINISTRATION SECTION - National Waiting Areas Parameter page (National Waiting Area Submenu) |
| AdminWaitingArea, Edit Read | 'Edit' link on ADMINISTRATION SECTION - National Waiting Areas Parameter page (National Waiting Area Submenu) |
| AdminWaitingArea, Index Read | 'National Waiting Area' Link on ADMINISTRATION SECTION |
| AdminWaitingArea, DeleteAction Update | 'Delete Record' button on ADMINISTRATION SECTION - National Waiting Area Parameter Delete page (National Waiting Area Submenu) |
| AdminWaitingArea, Edit Update | 'Submit' button on ADMINISTRATION SECTION - National Waiting Area Parameter Edit page (National Waiting Area Submenu) |
| AdminWaitingArea, Index Update | 'Add' button on ADMINISTRATION SECTION - National Waiting Area Parameter page (National Waiting Area Submenu) |
| AdminWhiteboardReport, Delete Read | 'Delete' link on ADMINISTRATION SECTION - Whiteboard Report page (Background Processor Submenu) |
| AdminWhiteboardReport, Edit Read | 'Edit' link on ADMINISTRATION SECTION - Whiteboard Report page (Background Processor Submenu) |
| AdminWhiteboardReport, Index Read | 'Whiteboard Report' tab on ADMINISTRATION SECTION - Background Processor page |
| AdminWhiteboardReport, Delete Update | 'Delete Record' button on ADMINISTRATION SECTION - Whiteboard Report Delete page (Background Processor Submenu) |
| AdminWhiteboardReport, Edit Update | 'Save' button on ADMINISTRATION SECTION - Whiteboard Report Edit page (Background Processor Submenu) |
| AdtOrderableItems, Index Read | Site Options, ADT Orderable Items Add/Delete hyperlink |
| AdtOrderableItems, Delete Update | 'Delete' hyperlink from the list of orderable items. |
| AdtOrderableItems, Index Update | 'Add' button from the Bed Board ADT Orderable Items Configuration. |

| Operation Name | Operation Description |
|---|--|
| BackgroundProcessors, Index Read | 'Background Processors' hyperlink from Site Options page. |
| BackgroundProcessors, Index Update | 'Save Scheduler' button from Background Processors page within Site Options. |
| AuditLogReport, Index Read | 'View audit log' link on ADMINISTRATION SECTION |
| rep, Audit Log Report | Access the Audit Log Report. |
| BedBoard, ChangeFacility Read | Click on a facility link from the VISN Network Bed Boards list. |
| BedBoard, Index Read | 'Return to VISN Network' hyperlink from the home page. |
| BedBoard, ShowFacilityBedSummaryReport Read | Click on a Facility Summary Report on VISN Network Bed Boards list |

| | |
|---|--|
| BedBoard, ShowVISNBedSummaryReport Read | Click on a VISN Summary Report on VISN Network Bed Boards list |
| BedBoardModule, Index Read | Site Options, Bed Board Module Enable/Disable link. |
| BedBoardModule, Index Update | 'Submit' button from the Bed Board Module Activation and Configuration page. |
| BedInformation, Index Read | Ward Occupancy, click on a hyperlink from the BED column. |
| BedInformation, ClearAll Read | Click on button 'Clear ALL Comments For ALL Wards Associate To This Bed...' |
| BedInformation, NotifyChange Read | 'Submit' button from the Add/Edit Bed Unavailable Reason page. |
| BedInformation, Index Update | Click on buttons 'Submit' and/or 'Update Reason and Comments'. |
| ContingencySettings, Index Read | 'Contingency Settings" link on Site Settings pages. |
| ContingencySettings, Index Update | 'Save' button on Contingency Settings page on Site Settings pages. |
| DischargeClinic, Index Read | Site Options, 'Discharge Appt Clinics Add/Delete' hyperlink. |
| DischargeClinic, Delete Update | Site Options, 'Discharge Appt Clinics Add/Delete' hyperlink, 'Delete' button. |
| DischargeClinic, Index Update | Site Options, 'Discharge Appt Clinics Add/Delete' hyperlink, 'Add' button. |
| EmsBedStatusAdmin, EMS Supervisor Read/Update | 'Assigned To' drop down on EMS Bed Edit page |
| EmsBedStatusAdmin, EMSBatchAssign Read | 'Batch Assign' button on Ems Bed Status Admin page |
| EmsBedStatusAdmin, EMSBatchAssign Update | 'Submit' button on EMS Bed Edit page on EMS Bed Status Admin page |
| EmsBedStatusAdmin, Edit Read | RoomBed column link click. |
| EmsBedStatusAdmin, Index Read | 'Return to VISN Network' link from the home page, 'Return to Regional Page' link, 'Go To Facility Bed Cleaning Page (EMS Staff Only) button. |
| EmsBedStatusAdmin, SaveConfirmation Read | 'Submit' button click in the Environmental Management Service Bed Status page. |
| EmsBedStatusAdmin, Edit Update | 'Submit' button click in the Environmental Management Service Bed Status page. |
| EMSMobile, EMSList Read | Load Bed Clean Requests on EMS Mobile Pages |
| EMSMobile, Users Read | Click on a User button on EMS Mobile Pages |
| EMSMobile, EMSList Update | Click on a Bed Clean Request button on EMS Mobile Pages |
| EMSMobile, Users Update | Click on Submit button after entering a PIN on EMS Mobile Pages |

| Operation Name | Operation Description |
|--------------------------------------|--|
| EmsNotification, AddEdit Read | 'Edit' link from the Current Locations table (EMS Bed Notification). |
| EmsNotification, AddEditAction Read | 'Submit' button from the EMS Bed Notification Edit page. |
| EmsNotification, Delete Read | 'Delete' link from the Current Locations table (EMS Bed Notification). |
| EmsNotification, Index Read | Site Options, 'EMS Notification Add/Edit' link |
| EmsNotification, DeleteAction Update | 'Delete Record' button from the EMS Bed Status Notification Delete page. |
| EmsNotification, Index Update | 'Submit' button from the EMS Bed Notification Edit page or Notifications Add page. |
| EmsStaff, Delete Read | 'Delete' link on EMS Staff page on Site Options pages |

| | |
|--|---|
| EmsStaff, Edit Read | 'Edit' link on EMS Staff page on Site Options pages |
| EmsStaff, Index Read | EMS Staff link on Site Options page |
| EmsStaff, Delete Update | 'Delete Record' button on Ems Staff Delete page on Site Options pages |
| EmsStaff, Edit Update | 'Submit' button on Ems Staff Edit page on Site Options pages |
| EventNotification, AddConfirmation Read | 'Submit' button from the Event Notification Add page. |
| EventNotification, AddEdit Read | 'Add' button or 'Edit' link from the Event Notifications page. |
| EventNotification, EditConfirmation Read | 'Submit' button from the Event Notifications Edit page. |
| EventNotification, Index Read | Site Options, 'Event Notification Add/Edit' hyperlink. |
| EventNotification, Index Update | 'Submit' button from the Event Notification Add page. |
| Exception, Index Read | Appears when an exception occurs. |
| FacilityDiversion, Add Read | 'Add' button from the Facility Diversion page. |
| FacilityDiversion, AddConfirmation Read | 'Add' button from the Add New Diversion Status page. |
| FacilityDiversion, Edit Read | 'Edit' link from the Facility Diversion page. |
| FacilityDiversion, EditConfirmation Read | 'Save' button from the Diversion Status edit page. |
| FacilityDiversion, FilterDiversions Read | 'Current Diversions' or 'All Diversions' button from the main Facility Diversions page. |
| FacilityDiversion, Index Read | 'Facility Diversion' hyperlink from the home page. |
| FacilityDiversion, Index Update | 'Add' button or 'Edit' link from the Facility Diversion page. |
| FacilitySettings, Index Read | Site Options, Facility Settings link |
| FacilitySettings, Index Update | Site Options, Facility Settings link, Submit button |
| Home, Index Read | Home page. |
| Home, Index2 Read | Current, Past 30-Days, Past 60-Days, Past 90-Days home page's buttons. |
| Home, PatientInquiry Read | Click on the patient link from the Patients Pending Placement list (Home page). |
| Home, RemoveAdmission Read | Remove link from the Patients Pending Placement list (Home page). |
| Home, UndoRemoveAdmission Read | Undo link from the Patients Pending Placement list (Home page). |

| Operation Name | Operation Description |
|--------------------------------------|---|
| Home, RemoveAdmissionPost Update | Remove link from the Patients Pending Placement list (Home page), Remove button from the confirmation page. |
| Home, UndoRemoveAdmissionPost Update | 'Undo' button on Undo Remove Admission Page on Facility HomePage |
| IconLegend, Index Read | 'Icon Legend' link from the bottom of the Home page or Site Options, BMS Icon Legend link. |
| IconLibrary, Edit Read | 'Edit' Link on Site Options - Site Configurable Icons page. |
| IconLibrary, Index Read | Site Options, Site Configurable Icons link. |
| IconLibrary, ResetConfirmation Read | 'Reset' button on Edit Site Configurable Icon page. |
| IconLibrary, Edit Update | 'Save' button on Site Options - Site Configurable Icons page. |

| | |
|---|---|
| IconLibrary, Index Update | 'Up/Down arrow' buttons on Site Options - Site Configurable Icons page. |
| IconLibrary, ResetConfirmation Update | 'Reset' button on Reset Site Configurable Icon page. |
| Information, Index Read | 'Information' link from the bottom of the Home page. |
| MaintainMarquee, Index Read | 'Maintain Marquee Text' link from the Administration Section's menu. |
| MaintainMarquee, ChangeMarquee Update | 'Submit' button from the ADMINISTRATION SECTION - MAINTAIN MARQUEE TEXT page. |
| NationalAndRegional, Index Read | Home page, Return to VISN Network link, Return to Regional Page link. |
| NewEvents, Index Read | Home page, New Events link. |
| Numi, Add Read | 'Add' button on ADMINISTRATION SECTION - Background Processors page (Background Processors Submenu). |
| Numi, Delete Read | 'Delete' Link on ADMINISTRATION SECTION - Background Processors page (Background Processors Submenu). |
| Numi, Edit Read | 'Edit' Link on ADMINISTRATION SECTION - Background Processors page (Background Processors Submenu). |
| Numi, Index Read | 'Numi' tab on ADMINISTRATION SECTION - Background Processors page (Background Processors Submenu). |
| Numi, Delete Update | 'Delete Record' button on ADMINISTRATION SECTION - Background Processors Delete page (Background Processors Submenu). |
| Numi, Edit Update | 'Save' button on ADMINISTRATION SECTION - Background Processors Add/Edit page (Background Processors Submenu). |
| http://tempuri.org/IAdministrativeFunctions/GetDomains | Functions used in the Administration Section, Add/Edit BMS User and Edit BMS Site submenus. |
| http://tempuri.org/IAdministrativeFunctions/GetCurrentDomain | |
| http://tempuri.org/IAdministrativeFunctions/GetRoles | |
| http://tempuri.org/IAdministrativeFunctions/GetBulkPolicies | |
| http://tempuri.org/IAdministrativeFunctions/GrantPermission | |
| http://tempuri.org/IAdministrativeFunctions/RevokePermission | |

| Operation Name | Operation Description |
|---|-----------------------|
| http://tempuri.org/IAdministrativeFunctions/GetRoleByName | |
| http://tempuri.org/IAdministrativeFunctions/GetPermissionsByResourceType | |
| http://tempuri.org/IAdministrativeFunctions/GetAllUsersAndDomain | |
| http://tempuri.org/IAdministrativeFunctions/GetAllUserRoles | |
| http://tempuri.org/IAdministrativeFunctions/AssignUser | |
| http://tempuri.org/IAdministrativeFunctions/DeassignUser | |
| http://tempuri.org/IAdministrativeFunctions/GetPolicy | |
| http://tempuri.org/IAdministrativeFunctions/ClearPermissionsForResource | |

| |
|---|
| http://tempuri.org/IAdministrativeFunctions/AddActionEntityType |
| http://tempuri.org/IAdministrativeFunctions/AddOperation |
| http://tempuri.org/IAdministrativeFunctions/AddRole |
| http://tempuri.org/IAdministrativeFunctions/AddTask |
| http://tempuri.org/IAdministrativeFunctions/AssignOperations |
| http://tempuri.org/IAdministrativeFunctions/AssignRole |
| http://tempuri.org/IAdministrativeFunctions/ChangeUserRolePassword |
| http://tempuri.org/IAdministrativeFunctions/DeassignOperations |
| http://tempuri.org/IAdministrativeFunctions/DeassignRole |
| http://tempuri.org/IAdministrativeFunctions/DeleteActionEntityType |
| http://tempuri.org/IAdministrativeFunctions/DeleteOperation |
| http://tempuri.org/IAdministrativeFunctions/DeletePermissionForResourceAndOperation |
| http://tempuri.org/IAdministrativeFunctions/DeletePermissionsForResourcesAndOperations |
| http://tempuri.org/IAdministrativeFunctions/DeleteRole |
| http://tempuri.org/IAdministrativeFunctions/DeleteTask |
| http://tempuri.org/IAdministrativeFunctions/GetActionEntityTypes |
| http://tempuri.org/IAdministrativeFunctions/GetAvailableDomains |
| http://tempuri.org/IAdministrativeFunctions/GetCallerIsSuperUser |
| http://tempuri.org/IAdministrativeFunctions/GetConnectedRolesAndOperations |
| http://tempuri.org/IAdministrativeFunctions/GetEntityTypes |
| http://tempuri.org/IAdministrativeFunctions/GetOperationByName |
| http://tempuri.org/IAdministrativeFunctions/GetOperationByNameExcludingId |

| Operation Name | Operation Description |
|---|-----------------------|
| http://tempuri.org/IAdministrativeFunctions/GetOperations | |
| http://tempuri.org/IAdministrativeFunctions/GetRoleByNameExcludingId | |
| http://tempuri.org/IAdministrativeFunctions/GetRoleDefinition | |
| http://tempuri.org/IAdministrativeFunctions/GetRolesDefinitionIntersect | |
| http://tempuri.org/IAdministrativeFunctions/GetRoleUsers | |
| http://tempuri.org/IAdministrativeFunctions/GetSubscriptions | |
| http://tempuri.org/IAdministrativeFunctions/GetTaskByName | |
| http://tempuri.org/IAdministrativeFunctions/GetTaskByNameExcludingId | |

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|--|--|
| http://tempuri.org/IAdministrativeFunctions/GetTaskDefinition | |
| http://tempuri.org/IAdministrativeFunctions/GetTasks | |
| http://tempuri.org/IAdministrativeFunctions/GetUserBySid | |
| http://tempuri.org/IAdministrativeFunctions/GetUserByUserName | |
| http://tempuri.org/IAdministrativeFunctions/GetUserDefinedRoles | |
| http://tempuri.org/IAdministrativeFunctions/GetUserGroupId | |
| http://tempuri.org/IAdministrativeFunctions/GetUserRoles | |
| http://tempuri.org/IAdministrativeFunctions/InsertPermissionForResourceAndOperation | |
| http://tempuri.org/IAdministrativeFunctions/InsertPermissionsForResourcesAndOperations | |
| http://tempuri.org/IAdministrativeFunctions/InsertResource | |
| http://tempuri.org/IAdministrativeFunctions/IsChild | |
| http://tempuri.org/IAdministrativeFunctions/RefreshCache | |
| http://tempuri.org/IAdministrativeFunctions/SearchUsers | |
| http://tempuri.org/IAdministrativeFunctions/SetCurrentDomain | |
| http://tempuri.org/IAdministrativeFunctions/SynchronizeAllSubscribers | |
| http://tempuri.org/IAdministrativeFunctions/UpdateOperation | |
| http://tempuri.org/IAdministrativeFunctions/UpdateRole | |
| http://tempuri.org/IAdministrativeFunctions/UpdateTask | |
| Patient, Admission Read | 'Edit' link from the Home page, Patients Pending Placement list. |
| Patient, Select Read | 'Add New Patient' link from the Home page, Patients Pending Placement section. |
| Patient, Admission Update | 'Submit' button from ADD/EDIT Patients Pending Placement page. |

| Operation Name | Operation Description |
|-------------------------------------|--|
| rep, Active Admission Orders Report | Access the Active Admission Orders Report. |
| rep, Active Discharge Orders Report | Access the Active Discharge Orders Report. |
| rep, Active Transfer Orders Report | Access the Active Transfer Orders Report. |
| rep, Antic Discharge Orders Report | Access the Antic Discharge Orders Report. |
| rep, BED AVAILABILITY STATUS REPORT | Access the BED AVAILABILITY STATUS REPORT. |
| rep, Bed Specialty Report | Access the Bed Specialty Report. |
| rep, Bed Specialty Roster | Access the Bed Specialty Roster. |
| rep, Bed Summary Report | Access the Bed Summary Report. |
| rep, Bed Turnaround Time Report | Access the Bed Turnaround Time Report. |

| | |
|---|--|
| rep, Beds Out of Service Report (All) | Access the Beds Out of Service Report (All). |
| rep, Beds Out of Service Report (By Date) | Access the Beds Out of Service Report (By Date). |
| rep, Discharges In Progress | Access the Discharges In Progress. |
| rep, Emergency Management Evacuation Report | Access Emergency Management Evacuation Report |
| rep, Icon Usage Report | Access the Icon Usage Report |
| rep, Patient Inquiry | Access the Patient Inquiry report. |
| rep, Patient Movement Report | Access the Patient Movement Report. |
| rep, Patient Movements by Date | Access the Patient Movements by Date. |
| rep, Patients w Discharge Appointments | Access the Patients w Discharge Appointments. |
| rep, Scheduled Admissions by Date | Access the Scheduled Admissions by Date. |
| rep, Scheduled Admissions Report | Access the Scheduled Admissions Report. |
| rep, VISN Bed Summary Report | Access VISN Bed Summary Report |
| rep, VISN Network Active Report | Access the VISN Network Active Report. |
| rep, VISN Network Audit Report | Access the VISN Network Audit Report. |
| rep, VISN Network Contract Report | Access the VISN Network Contract Report. |
| rep, VISN Network Disposition Report | Access the VISN Network Disposition Report. |
| rep, Wait List Status Report | Access the Patients Pending Placement Status Report. |
| Reports, Index Read | 'Submit' buttons from the Home page corresponding to the reports. |
| SiteOptions, Index Read | Home page, Site Options link. |
| SiteOptions, EvacuationConfirmation Read | Access to Evacuation Confirmation page. |
| SiteOptions, Index Update | 'Submit' button from Site Options page. |
| SiteOptions, EvacuationConfirmation Update | 'Save' button from Evacuation Confirmation page. |
| Transfer, AddTransfer Read | VISN page, Add New Patient button, Submit button from the Select Patient page. |
| Transfer, EditTransfer Read | 'Edit' link from the VISN page, Patients in Community |

| Operation Name | Operation Description |
|-----------------------------------|---|
| | Hospitals list. |
| Transfer, FinalizeTransfer Read | 'Finalize' link from the VISN page, Patients in Community Hospitals list. |
| Transfer, Index Read | VISN page, Add New Patient button. |
| Transfer, AddTransfer Update | VISN page, Add New Patient button, Submit button from the Select Patient page, and Submit button from the Enter Patient Data page. |
| Transfer, EditTransfer Update | 'Edit' link from the VISN page's Patients in Community Hospitals list and then Submit button. |
| Transfer, FinalizeTransfer Update | 'Finalize' link from the VISN page's Patients in Community Hospitals list and then Submit button from the Finalize Patient Data page. |
| UnavailableReason, Delete Read | 'Delete' link from the Bed Board Site Unavailable Reason page's list. |

| | |
|--|---|
| UnavailableReason, Edit Read | 'Edit' link from the Bed Board Site Unavailable Reason page's list. |
| UnavailableReason, Index Read | Site Options, Unavailable Reason Add/Edit link. |
| UnavailableReason, Delete Update | 'Delete' link from the Bed Board Site Unavailable Reason page's list and then 'Delete Record' button. |
| UnavailableReason, Edit Update | 'Edit' link from the Bed Board Site Unavailable Reason page's list and then Submit button. |
| UnavailableReason, Index Update | 'Add' button from the Bed Board Site Unavailable Reason page. |
| UserConfiguration, Index Read | Site Options, Add/Edit BMS User link. |
| UserConfiguration, SearchUser Read | 'Find and Save' buttons from the 'Select user' page ('Select Existing NT User Name' button from the Site Options, 'Add/Edit BMS User' link). |
| UserConfiguration, SelectUser Read | 'Select Existing NT User Name' button from the Site Options - Add/Edit BMS User page. |
| UserConfiguration, Index Update | 'Submit' button from the Site Options - Add/Edit BMS User page. |
| VistaIntegration, Audit Read | 'Audit' tab on ADMINISTRATION SECTION - Background Processors page (Background Processors Submenu) and 'Filter By' button from the 'Audit' tab. |
| VistaIntegration, Categories Read | 'Vista Integration' tab on ADMINISTRATION SECTION - Background Processors page (Background Processors Submenu). |
| VistaIntegration, DeleteScheduler Read | 'Add new scheduler' link and select a scheduled name from the 'Scheduled' tab. |
| VistaIntegration, Index Read | 'Background Processors' link on ADMINISTRATION SECTION. |
| VistaIntegration, Schedulers Read | 'Schedulers' tab on ADMINISTRATION SECTION - Background Processors page (Background Processors Submenu). |
| VistaIntegration, TestMDWSCConnection Read | 'TestMDWSCConnection' button from the 'Vista Sites' tab. |
| VistaIntegration, TestODBCConnection Read | 'TestODBCConnection' button from the 'Vista Sites' tab. |
| VistaIntegration, VistaSites Read | 'Vista Sites' tab on ADMINISTRATION SECTION - Background Processors page (Background Processors Submenu). |
| VistaIntegration, Categories Update | 'Save and Run' buttons from the 'Vista Integration' tab. |
| VistaIntegration, DeleteScheduler Update | 'Delete' link from the 'Scheduled' tab and then 'Delete Record' button. |

| Operation Name | Operation Description |
|-------------------------------------|--|
| VistaIntegration, Schedulers Update | 'Save' button from the 'Scheduled' tab. |
| VistaIntegration, VistaSites Update | 'Save' button from the 'Vista Sites' tab. |
| WaitingArea, Delete Read | 'Delete' link from the Patient Waiting Areas page's list of Current Waiting Areas. |
| WaitingArea, Edit Read | 'Edit' link from the Patient Waiting Areas page's list of Current Waiting Areas. |
| WaitingArea, Index Read | Site Options, Waiting Area Add/Delete link. |
| WaitingArea, DeleteAction Update | 'Delete' link from the Patient Waiting Areas page's list of Current Waiting Areas and then 'Delete Record' button. |
| WaitingArea, Edit Update | 'Edit' link from the Patient Waiting Areas page's list of Current Waiting Areas and then Submit button. |
| WaitingArea, Index Update | 'Add' button from the Patient Waiting Areas page. |
| WardConfiguration, Delete Read | 'Delete' link from the Bed Board Ward Configuration, Current Vista Wards list. |

| | |
|---------------------------------------|--|
| WardConfiguration, Index Read | Site Options, Vista Ward Add/Edit link. |
| WardConfiguration, Index Update | Site Options, Vista Ward Add/Edit link, Save button. |
| WardConfiguration, DeleteWard Update | Site Options, Vista Ward Add/Edit link, Delete operation. |
| WardOccupancy, Index Read | 'Submit' button from the Home page corresponding to the Ward Occupancy. |
| WardWhiteboard, Edit Read | Click on a link from the BED column from WARD Whiteboard Report. |
| WardWhiteboard, EditPT Read | Click on a link from the PT column from the WARD Whiteboard Report. |
| WardWhiteboard, Index Read | Home page, 'Ward Whiteboard' link. |
| WardWhiteboard, NotifyChange Read | Click on a link from the BED column from WARD Whiteboard Report and then on the Submit button. |
| WhiteboardStaff, Index Read | Click on the checkbox from the STAFF column from the WARD Whiteboard Home. |
| WardWhiteboard, ShowReport Read | 'Export Report' link from the right of the WARD Whiteboard Home page or WARD Whiteboard Report page, Export Report. |
| WardWhiteboard, Submit Read | 'Submit' button from the WARD Whiteboard Home page. |
| WardWhiteBoard, WardWhiteBoard Read | Home page, 'Ward Whiteboard' link, Submit button from the WARD Whiteboard Home. |
| WardWhiteboard, ClearAll Read | Click on a link from the BED column from WARD Whiteboard Report and then click on the button 'Clear ALL Comments For ALL Wards Associate To This Bed...' |
| WardWhiteBoard, WardWhiteBoard Update | Click on a staff name from the STAFF column from the WARD WhiteBoard Report and then click on the image 'Save Staff'. |
| WhiteboardStaff, Index Update | Click on the checkbox from the STAFF column from WARD Whiteboard Report and then on the 'Save' button. |
| WardWhiteboard, Edit Update | Click on a link from the BED column from WARD Whiteboard Report and then on the Submit button. |

7.3 Task Definitions

To view the definition of a task, select Task definitions from the left-hand panel of the main Policy Manager window and in the list in the right-hand area, double-click the task to display the following dialog window.

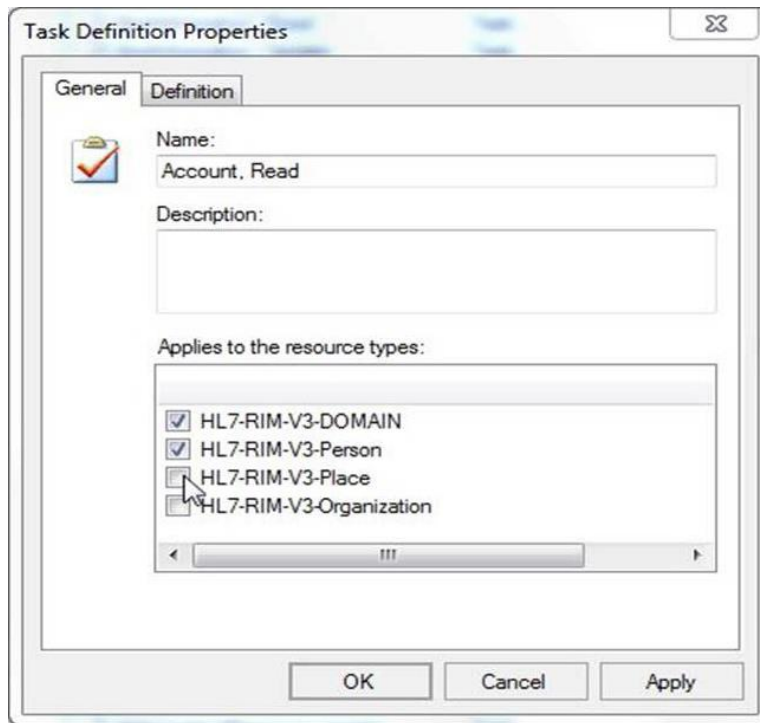


Figure 79-Task Definition

To determine what resource type the task refers to, select one or more of the elements in the “*Applies to resource types*” area.

To view the operations that need to be performed in order to complete the task, select the Definition tab to display it as in the following image:

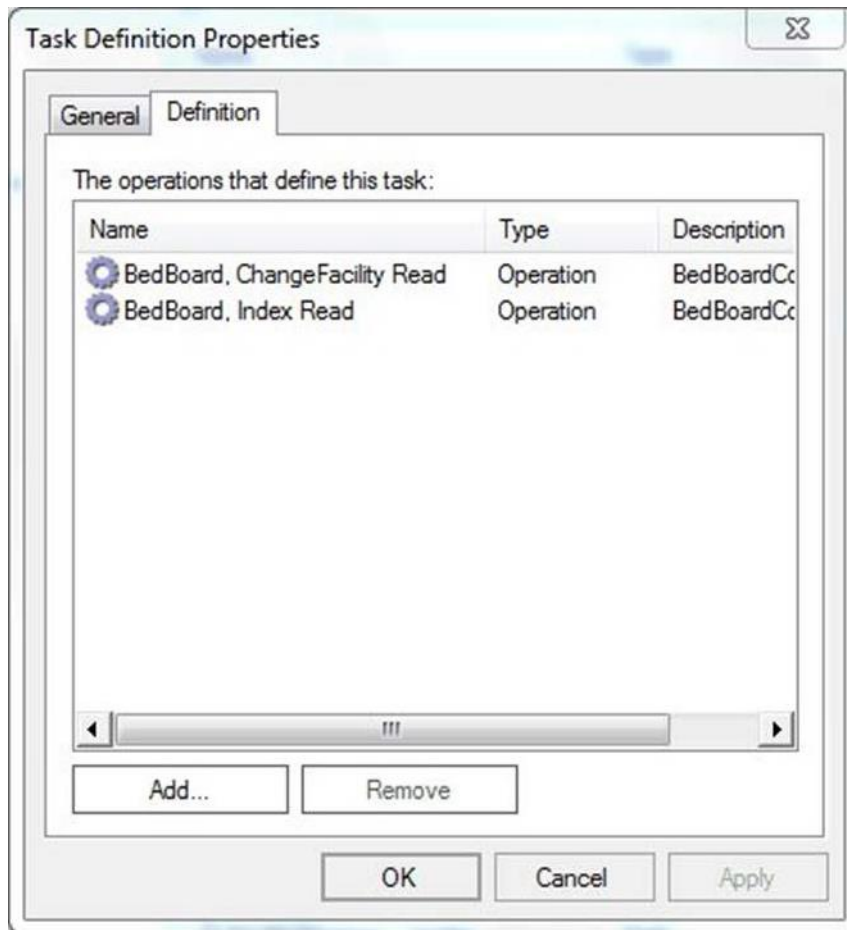


Figure 80-Operations Defining a Task

Use the Add and Remove buttons to add or remove operations from the list.

A list with all the tasks, along with corresponding operations of the BMS application, is presented below:

Table 28- BMS Tasks

| Task Name | Task Description | Operation Name |
|-------------|--|-------------------------------|
| Admin, Read | Admin Read permission, user has the right only to view data. | Admin, AddEditUser Read |
| | | Admin, FacilityEdit Read |
| | | Admin, Index Read |
| | | Admin, SelectUser Read |
| | | Admin, SisterSiteAddEdit Read |
| | | Admin, AddUserOperations Read |
| | | Admin, RemoveUsers Read |
| | | Admin, SearchUser Read |
| | | Admin, SearchUsers Read |
| | | Admin, ClearCache Read |
| | | |
| | | Admin, FacilityEdit Update |

| | | |
|-----------------------|--|---------------------------------|
| Admin, Update | Admin Update permission, user has the right to modify data. | Admin, SisterSiteAddEdit Update |
| | | Admin, AddUserOperations |
| | | Admin, RemoveUserOperations |
| AdminComments, Read | AdminComments Read permission, user has the right only to view data. | AdminComments, Delete Read |
| | | AdminComments, Edit Read |
| | | AdminComments, Index Read |
| AdminComments, Update | AdminComments Update permission, user has the right to modify data. | AdminComments, Index Update |
| AdminIcon, Read | AdminIcon Read permission, user has the right only to view data. | AdminIcon, Delete Read |
| | | AdminIcon, Edit Read |
| | | AdminIcon, Index Read |
| | | AdminIcon, Search Read |
| | | AdminIcon, ViewIconReport Read |
| AdminIcon, Update | AdminIcon Update permission, user has the right to modify data. | AdminIcon, Delete Update |
| | | AdminIcon, Edit Update |

| Task Name | Task Description | Operation Name |
|-----------------------------------|--|---------------------------------|
| | | AdminIcon, Index Update |
| AdminSpecialtyAssociation, Read | AdminSpecialtyAssociation Read permission, user has the right only to view data. | AdminSpecialtyAssociation, |
| | | AdminSpecialtyAssociation, |
| AdminSpecialtyAssociation, Update | AdminSpecialtyAssociation Update permission, user has the right to modify data. | AdminSpecialtyAssociation, |
| | | AdminSpecialtyAssociation, |
| AdminUnavailableReason, Read | AdminUnavailableReason Read permission, user has the right only to view data. | AdminUnavailableReason, |
| | | AdminUnavailableReason, Edit |
| | | AdminUnavailableReason, Index |
| AdminUnavailableReason, Update | AdminUnavailableReason Update permission, user has the right to modify data. | AdminUnavailableReason, |
| | | AdminUnavailableReason, Edit |
| | | AdminUnavailableReason, Index |
| AdminWaitingArea, Read | AdminWaitingArea Read permission, user has the right only to view data. | AdminWaitingArea, Delete Read |
| | | AdminWaitingArea, Edit Read |
| | | AdminWaitingArea, Index Read |
| AdminWaitingArea, Update | AdminWaitingArea Update permission, user has the right to modify data. | AdminWaitingArea, DeleteAction |
| | | AdminWaitingArea, Edit Update |
| | | AdminWaitingArea, Index Update |
| AdminWhiteboardReport, Read | AdminWhiteboardReport Read permission, user has the right only to view data. | AdminWhiteboardReport, Delete |
| | | AdminWhiteboardReport, Edit |
| | | AdminWhiteboardReport, Index |
| AdminWhiteboardReport, Update | AdminWhiteboardReport Update permission, user has the right to modify data. | AdminWhiteboardReport, Delete |
| | | AdminWhiteboardReport, Edit |
| AdtOrderableItems, Read | AdtOrderableItems Read permission, user has the right only to view data. | AdtOrderableItems, Index Read |
| AdtOrderableItems, Update | AdtOrderableItems Update permission, user has the right to modify data. | AdtOrderableItems, Delete |
| | | AdtOrderableItems, Index Update |

| | | |
|----------------------------|---|-----------------------------|
| BackgroundProcessors, Read | BackgroundProcessors Read permission, user has the right only to view data. | BackgroundProcessors, Index |
| BackgroundProcessors, | BackgroundProcessors Update permission, user has the right to modify data. | BackgroundProcessors, Index |
| AuditLogReport, Read | AuditLogReport Read permission, user has the | AuditLogReport, Index Read |

| Task Name | Task Description | Operation Name |
|-----------------------------------|---|-----------------------------------|
| | only to view data. | rep, Audit Log Report |
| BedBoard, Read | BedBoard Read permission, user has the right only to view data. | BedBoard, ChangeFacility Read |
| | | BedBoard, Index Read |
| | | BedBoard, |
| BedBoardModule, Read | BedBoardModule Read permission, user has the right only to view data. | BedBoardModule, Index Read |
| BedBoardModule, Update | BedBoardModule Update permission, user has the right to modify data. | BedBoardModule, Index Update |
| BedInformation, Read | BedInformation Read permission, user has the right only to view data. | BedInformation, Index Read |
| | | BedInformation, ClearAll Read |
| | | BedInformation, NotifyChange Read |
| BedInformation, Update | BedInformation Update permission, user has the right to modify data. | BedInformation, Index Update |
| ContingencySettings, Read | ContingencySettings Read permission, user has the right only to view data. | ContingencySettings, Index Read |
| ContingencySettings, Update | ContingencySettings Update permission, user has the right to modify data. | ContingencySettings, Index Update |
| DischargeClinic, Read | DischargeClinic Read permission, user has the right only to view data. | DischargeClinic, Index Read |
| DischargeClinic, Update | DischargeClinic Update permission, user has the right to modify data. | DischargeClinic, Delete Update |
| | | DischargeClinic, Index Update |
| EmsBedStatusAdmin, EMS Supervisor | EmsBedStatusAdmin EMS Supervisor permission, user has the right to re-assign the bed cleaning to another person and to batch assign the cleaning to a person. | EmsBedStatusAdmin, EMS |
| | | EmsBedStatusAdmin, |
| | | EmsBedStatusAdmin, |
| EmsBedStatusAdmin, Read | EmsBedStatusAdmin Read permission, user has the right only to view data. | EmsBedStatusAdmin, Edit Read |
| | | EmsBedStatusAdmin, Index Read |
| | | EmsBedStatusAdmin, |
| EmsBedStatusAdmin, Update | EmsBedStatusAdmin Update permission, user has the right to modify data. | EmsBedStatusAdmin, Edit Update |
| EMSMobile, Read | EMSMobile Read permission, user has the right only | EMSMobile, EMSList Read |

| Task Name | Task Description | Operation Name |
|-----------------------|--|--------------------------------|
| | view data. | EMSMobile, Users Read |
| EMSMobile, Update | EMSMobile Update permission, user has the right to modify data. | EMSMobile, EMSList Update |
| | | EMSMobile, Users Update |
| EmsNotification, Read | EmsNotification Read permission, user has the right only to view data. | EmsNotification, AddEdit Read |
| | | EmsNotification, AddEditAction |
| | | EmsNotification, Delete Read |

| | | |
|---------------------------|--|--|
| | | EmsNotification, Index Read |
| EmsNotification, Update | EmsNotification Update permission, user has the right to modify data. | EmsNotification, DeleteAction EmsNotification, Index Update |
| EmsStaff, Read | EmsStaff Read permission, user has the right only to view data. | EmsStaff, Delete Read EmsStaff, Edit Read EmsStaff, Index Read |
| EmsStaff, Update | EmsStaff Update permission, user has the right to modify data. | EmsStaff, Delete Update EmsStaff, Edit Update |
| EventNotification, Read | EventNotification Read permission, user has the right only to view data. | EventNotification, EventNotification, AddEdit Read EventNotification, EventNotification, Index Read |
| EventNotification, Update | EventNotification Update permission, user has the right to modify data. | EventNotification, Index Update |
| Exception, Read | Exception Read permission, user has the right only to view data. | Exception, Index Read |
| FacilityDiversion, Read | FacilityDiversion Read permission, user has the right only to view data. | FacilityDiversion, Add Read FacilityDiversion, FacilityDiversion, Edit Read FacilityDiversion, EditConfirmation FacilityDiversion, FilterDiversions FacilityDiversion, Index Read |
| FacilityDiversion, Update | FacilityDiversion Update permission, user has the right to modify data. | FacilityDiversion, Index Update |

| Task Name | Task Description | Operation Name |
|--------------------------|---|---|
| FacilitySettings, Read | FacilitySettings Read permission, user has the right only to view data. | FacilitySettings, Index Read |
| FacilitySettings, Update | FacilitySettings Update permission, user has the right to modify data. | FacilitySettings, Index Update |
| Home, Read | Home Read permission, user has the right only to view data. | Home, Index Read Home, Index2 Read Home, PatientInquiry Read Home, RemoveAdmission Read Home, UndoRemoveAdmission |
| Home, Update | Home Update permission, user has the right to modify data. | Home, RemoveAdmissionPost Home, UndoRemoveAdmissionPost |
| IconLegend, Read | IconLegend Read permission, user has the right only to view data. | IconLegend, Index Read |
| IconLibrary, Read | IconLibrary Read permission, user has the right only to view data. | IconLibrary, Edit Read IconLibrary, Index Read IconLibrary, ResetConfirmation |
| IconLibrary, Update | IconLibrary Update permission, user has the right | IconLibrary, Edit Update IconLibrary, Index Update |

| | | |
|---------------------------|--|---------------------------------------|
| | to modify data. | IconLibrary, ResetConfirmation |
| Information, Read | Information Read permission, user has the right only to view data. | Information, Index Read |
| MaintainMarquee, Read | MaintainMarquee Read permission, user has the right only to view data. | MaintainMarquee, Index Read |
| MaintainMarquee, Update | MaintainMarquee Update permission, user has the right to modify data. | MaintainMarquee, ChangeMarquee Update |
| NationalAndRegional, Read | NationalAndRegional Read permission, user has the right only to view data. | NationalAndRegional, Index Read |
| NewEvents, Read | NewEvents Read permission, user has the right only to view data. | NewEvents, Index Read |
| Numi, Read | NUMI Read permission, user has the right only to view data. | Numi, Add Read |
| | | Numi, Delete Read |

| Task Name | Task Description | Operation Name |
|---|---|---|
| | | Numi, Edit Read |
| | | Numi, Index Read |
| Numi, Update | NUMI Update permission, user has the right to modify data. | Numi, Delete Update |
| | | Numi, Edit Update |
| PAP, User | PAP permission, the right to access methods exposed by PAP service. | http://tempuri.org/IAdministrativeFunctions/GetDomains |
| | | http://tempuri.org/IAdministrativeFunctions/GetCurrentDomain |
| | | http://tempuri.org/IAdministrativeFunctions/GetRoles |
| | | http://tempuri.org/IAdministrativeFunctions/GetBulkPolicies |
| | | http://tempuri.org/IAdministrativeFunctions/GrantPermission |
| | | http://tempuri.org/IAdministrativeFunctions/RevokePermission |
| | | http://tempuri.org/IAdministrativeFunctions/GetRoleByName |
| | | http://tempuri.org/IAdministrativeFunctions/GetPermissionsByResourceType |
| | | http://tempuri.org/IAdministrativeFunctions/GetAllUsersAndDomain |
| | | http://tempuri.org/IAdministrativeFunctions/GetAllUserRoles |
| | | http://tempuri.org/IAdministrativeFunctions/AssignUser |
| | | http://tempuri.org/IAdministrativeFunctions/DeassignUser |
| | | http://tempuri.org/IAdministrativeFunctions/GetPolicy |
| | | http://tempuri.org/IAdministrativeFunctions/ClearPermissionsForResource |
| | | http://tempuri.org/IAdministrativeFunctions/AddActionEntityType |
| | | http://tempuri.org/IAdministrativeFunctions/AddOperation |
| http://tempuri.org/IAdministrativeFunctions/AddRole | | |
| http://tempuri.org/IAdministrativeFunctions/AddTask | | |
| http://tempuri.org/IAdministrativeFunctions/AssignOperations | | |

| |
|---|
| http://tempuri.org/IAdministrativeFunctions/AssignRole |
| http://tempuri.org/IAdministrativeFunctions/ChangeUser |

| Task Name | Task Description | Operation Name |
|-----------|------------------|---|
| | | Password |
| | | http://tempuri.org/IAdministrativeFunctions/DeassignOperations |
| | | http://tempuri.org/IAdministrativeFunctions/DeassignRole |
| | | http://tempuri.org/IAdministrativeFunctions/DeleteActionEntityType |
| | | http://tempuri.org/IAdministrativeFunctions/DeleteOperation |
| | | http://tempuri.org/IAdministrativeFunctions/DeletePermissionForResourceAndOperation |
| | | http://tempuri.org/IAdministrativeFunctions/DeletePermissionsForResourcesAndOperations |
| | | http://tempuri.org/IAdministrativeFunctions/DeleteRole |
| | | http://tempuri.org/IAdministrativeFunctions/DeleteTask |
| | | http://tempuri.org/IAdministrativeFunctions/GetActionEntityTypes |
| | | http://tempuri.org/IAdministrativeFunctions/GetAvailableDomains |
| | | http://tempuri.org/IAdministrativeFunctions/GetCallerIsSuperUser |
| | | http://tempuri.org/IAdministrativeFunctions/GetConnectedRolesAndOperations |
| | | http://tempuri.org/IAdministrativeFunctions/GetEntityTypes |
| | | http://tempuri.org/IAdministrativeFunctions/GetOperationByName |
| | | http://tempuri.org/IAdministrativeFunctions/GetOperationByNameExcludingId |
| | | http://tempuri.org/IAdministrativeFunctions/GetOperations |
| | | http://tempuri.org/IAdministrativeFunctions/GetRoleByNameExcludingId |
| | | http://tempuri.org/IAdministrativeFunctions/GetRoleDefinition |
| | | http://tempuri.org/IAdministrativeFunctions/GetRolesDefinitionIntersect |
| | | http://tempuri.org/IAdministrativeFunctions/GetRoleUsers |
| | | http://tempuri.org/IAdministrativeFunctions/GetSubscriptions |

| Task Name | Task Description | Operation Name |
|-----------|------------------|---|
| | | http://tempuri.org/IAdministrativeFunctions/GetTaskByName |
| | | http://tempuri.org/IAdministrativeFunctions/GetTaskByNameExcludingId |
| | | http://tempuri.org/IAdministrativeFunctions/GetTaskDefinition |
| | | http://tempuri.org/IAdministrativeFunctions/GetTasks |
| | | http://tempuri.org/IAdministrativeFunctions/GetUserBySid |

| | | |
|---------------------------|--|---|
| | | http://tempuri.org/IAdministrativeFunctions/GetUserByUserName http://tempuri.org/IAdministrativeFunctions/GetUserDefinedRoles http://tempuri.org/IAdministrativeFunctions/GetUserGroupId http://tempuri.org/IAdministrativeFunctions/GetUserRoles http://tempuri.org/IAdministrativeFunctions/InsertPermissionForResourceAndOperation http://tempuri.org/IAdministrativeFunctions/InsertPermissionsForResourceAndOperations http://tempuri.org/IAdministrativeFunctions/InsertResource http://tempuri.org/IAdministrativeFunctions/IsChild http://tempuri.org/IAdministrativeFunctions/RefreshCache http://tempuri.org/IAdministrativeFunctions/SearchUsers http://tempuri.org/IAdministrativeFunctions/SetCurrentDomain http://tempuri.org/IAdministrativeFunctions/SynchronizeAllSubscribers http://tempuri.org/IAdministrativeFunctions/UpdateOperation http://tempuri.org/IAdministrativeFunctions/UpdateRole http://tempuri.org/IAdministrativeFunctions/UpdateTask |
| Patient, Read | Patient Read permission, user has the right only to view data. | Patient, Admission Read Patient, Select Read |
| Patient, Update | Patient Update permission, user has the right to modify data. | Patient, Admission Update |
| Reporting Services, Fetch | Reporting Services Fetch permission, the right to bring | rep, Active Admission Orders Report |

| Task Name | Task Description | Operation Name |
|-----------|--|---|
| | the list of reports from Reporting Services. | rep, Active Discharge Orders Report |
| | | rep, Active Transfer Orders Report |
| | | rep, Antic Discharge Orders Report |
| | | rep, BED AVAILABILITY STATUS REPORT |
| | | rep, Bed Specialty Report |
| | | rep, Bed Specialty Roster |
| | | rep, Bed Summary Report |
| | | rep, Bed Turnaround Time Report |
| | | rep, Beds Out of Service Report (All) |
| | | rep, Beds Out of Service Report (By Date) |
| | | rep, Discharges In Progress |
| | | rep, Emergency Management Evacuation |
| | | rep, Icon Usage Report |
| | | rep, Patient Inquiry |
| | | rep, Patient Movement Report |
| | | rep, Patient Movements by Date |

| | | |
|-------------------|---|--|
| | | rep, Patients w Discharge Appointments |
| | | rep, Scheduled Admissions by Date |
| | | rep, Scheduled Admissions Report |
| | | rep, VISN Bed Summary Report |
| | | rep, VISN Network Active Report |
| | | rep, VISN Network Audit Report |
| | | rep, VISN Network Contract Report |
| | | rep, VISN Network Disposition Report |
| | | rep, Wait List Status Report |
| Reports, Read | Reports permission, user has the right only to view data. | Reports, Index Read |
| SiteOptions, Read | SiteOptions permission, user has the right only to view data. | SiteOptions, Index Read |
| | | SiteOptions, EvacuationConfirmation Read |
| SiteOptions, | SiteOptions Update permission, user has the right | SiteOptions, Index Update |

| Task Name | Task Description | Operation Name |
|-------------------------------------|--|-------------------------------------|
| | modify data. | SiteOptions, EvacuationConfirmation |
| Transfer, Read | Transfer permission, user has the right only to view data. | Transfer, AddTransfer Read |
| | | Transfer, EditTransfer Read |
| | | Transfer, FinalizeTransfer Read |
| | | Transfer, Index Read |
| Transfer, Update | Transfer Update permission, user has the right to modify data. | Transfer, AddTransfer Update |
| | | Transfer, EditTransfer Update |
| | | Transfer, FinalizeTransfer Update |
| UnavailableReason, Read | UnavailableReason Read permission, user has the right only to view data. | UnavailableReason, Delete Read |
| | | UnavailableReason, Edit Read |
| | | UnavailableReason, Index Read |
| UnavailableReason, Update | UnavailableReason Update permission, user has the right to modify data. | UnavailableReason, Delete Update |
| | | UnavailableReason, Edit Update |
| | | UnavailableReason, Index Update |
| UserConfiguration, Read | UserConfiguration permission, user has the right only to view data. | UserConfiguration, Index Read |
| | | UserConfiguration, SearchUser |
| | | UserConfiguration, SelectUser Read |
| UserConfiguration, Update | UserConfiguration Update permission, user has the right to modify data. | UserConfiguration, Index Update |
| VistaIntegration, Read | VistaIntegration permission, user has the right only to view data. | VistaIntegration, Audit Read |
| | | VistaIntegration, Categories Read |
| | | VistaIntegration, DeleteScheduler |
| | | VistaIntegration, Index Read |
| | | VistaIntegration, Schedulers Read |
| | | VistaIntegration, |
| | | VistaIntegration, |
| | | VistaIntegration, VistASites Read |
| VistaIntegration, Categories Update | | |

| | | |
|--------------------------|--|-------------------------------------|
| VistaIntegration, Update | VistaIntegration Update permission, user has the right to modify data. | VistaIntegration, DeleteScheduler |
| | | VistaIntegration, Schedulers Update |

| Task Name | Task Description | Operation Name |
|---------------------------|---|-------------------------------------|
| | | VistaIntegration, VistASites Update |
| WaitingArea, Read | WaitingArea permission, user has the right only to view data. | WaitingArea, Delete Read |
| | | WaitingArea, Edit Read |
| | | WaitingArea, Index Read |
| WaitingArea, Update | WaitingArea Update permission, user has the right to modify data. | WaitingArea, DeleteAction Update |
| | | WaitingArea, Edit Update |
| | | WaitingArea, Index Update |
| WardConfiguration, Read | WardConfiguration permission, user has the right only to view data. | WardConfiguration, Delete Read |
| | | WardConfiguration, Index Read |
| WardConfiguration, Update | WardConfiguration Update permission, user has the right to modify data. | WardConfiguration, Index Update |
| | | WardConfiguration, DeleteWard |
| WardOccupancy, Read | WardOccupancy permission, user has the right only to view data. | WardOccupancy, Index Read |
| WardWhiteboard, Read | WardWhiteboard permission, user has the right only to view data. | WardWhiteboard, Edit Read |
| | | WardWhiteboard, EditPT Read |
| | | WardWhiteboard, Index Read |
| | | WardWhiteboard, NotifyChange |
| | | WhiteboardStaff, Index Read |
| | | WardWhiteboard, ShowReport |
| | | WardWhiteboard, Submit Read |
| | | WardWhiteBoard, WardWhiteBoard |
| | | WardWhiteboard, ClearAll Read |
| WardWhiteboard, Update | WardWhiteboard Update permission, user has the right to modify data. | WardWhiteBoard, WardWhiteBoard |
| | | WhiteboardStaff, Index Update |
| | | WardWhiteboard, Edit Update |

7.4 Role Definitions

To view the actual definition of a BMS user role, from the Definitions folder select Role Definitions and double click the role name in the main panel of Policy Manager: in the Role Definition Properties dialog window, select the Definition tab to display it as in the following image:

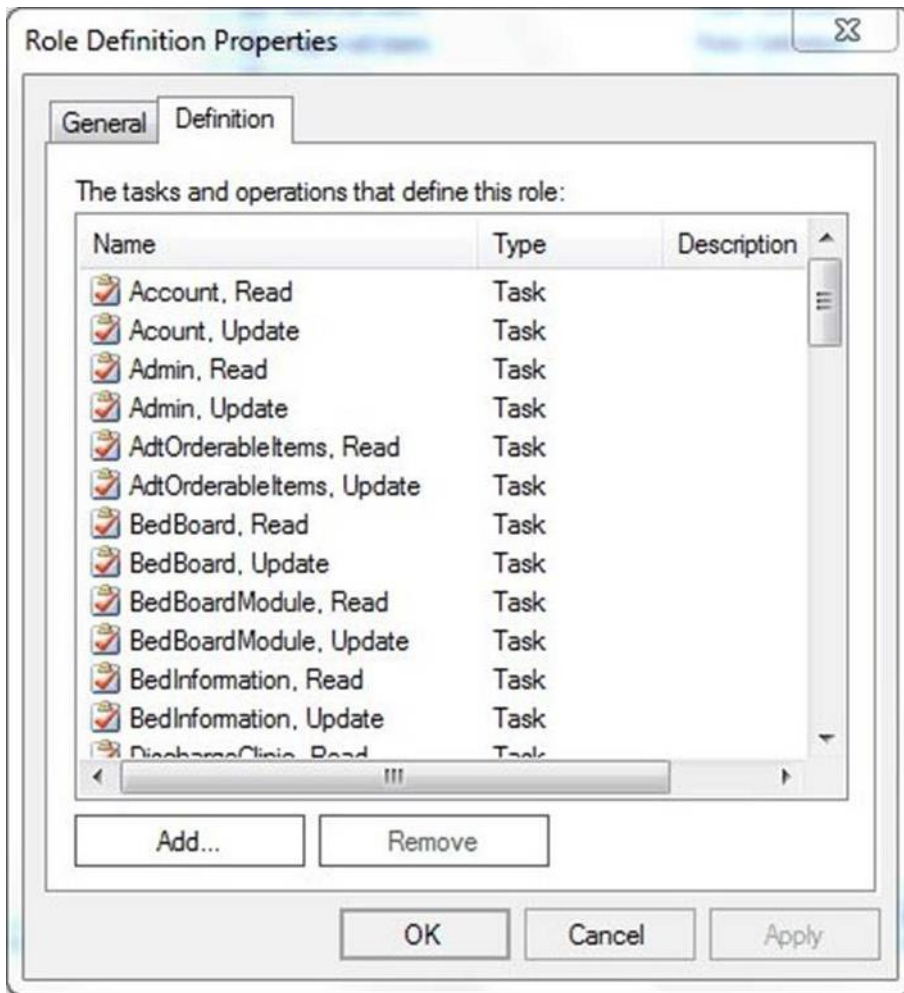


Figure 81-Role Definition

7.5 Assigning a Role to a User

To assign one of the roles defined for BMS to a user follow the steps below.

From the main page of Policy Manager, from Role assignments folder select a role then right-click and select “Assign Windows Users and Groups”: the following dialog is displayed.

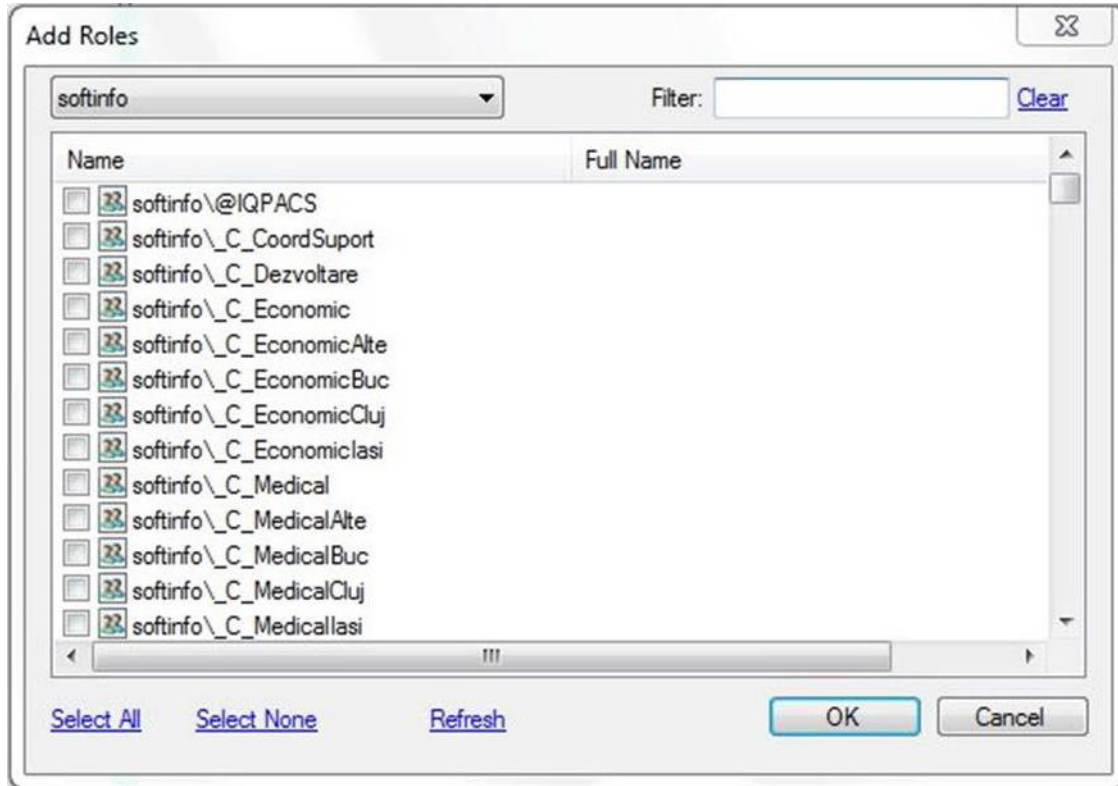


Figure 82-Assigning Roles to Users

A list of users and user groups existing in the current domain are displayed. Use the arrow button of the field in the upper left corner of the dialog to select the domain and the Filter field if necessary, and then click each applicable check box to select the user or group of users for which you want to assign the selected BMS role. Click OK to finalize the operation.

7.6 Adding a New Role

To add a new role, click the Add Role button from the main Policy Manager window or right-click Role Definitions folder and select New Role Definition...: the following dialog window is displayed:

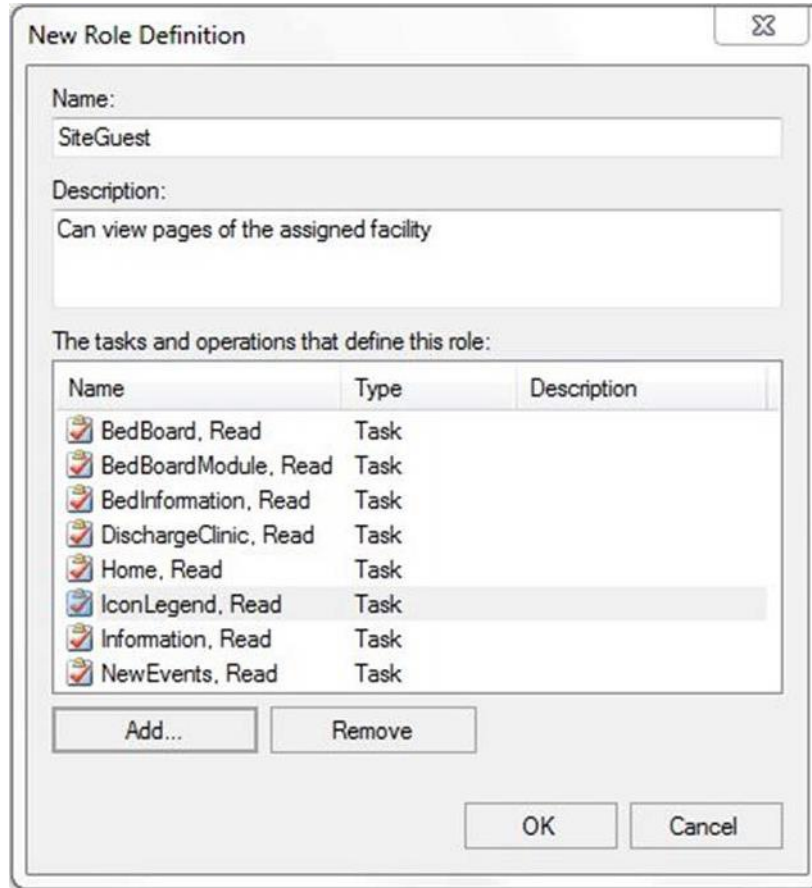


Figure 83-New Role Definition

Enter the name of the new role and a short description.

To add the tasks and operations that can be performed for this role click the Add button to display the following dialog window:

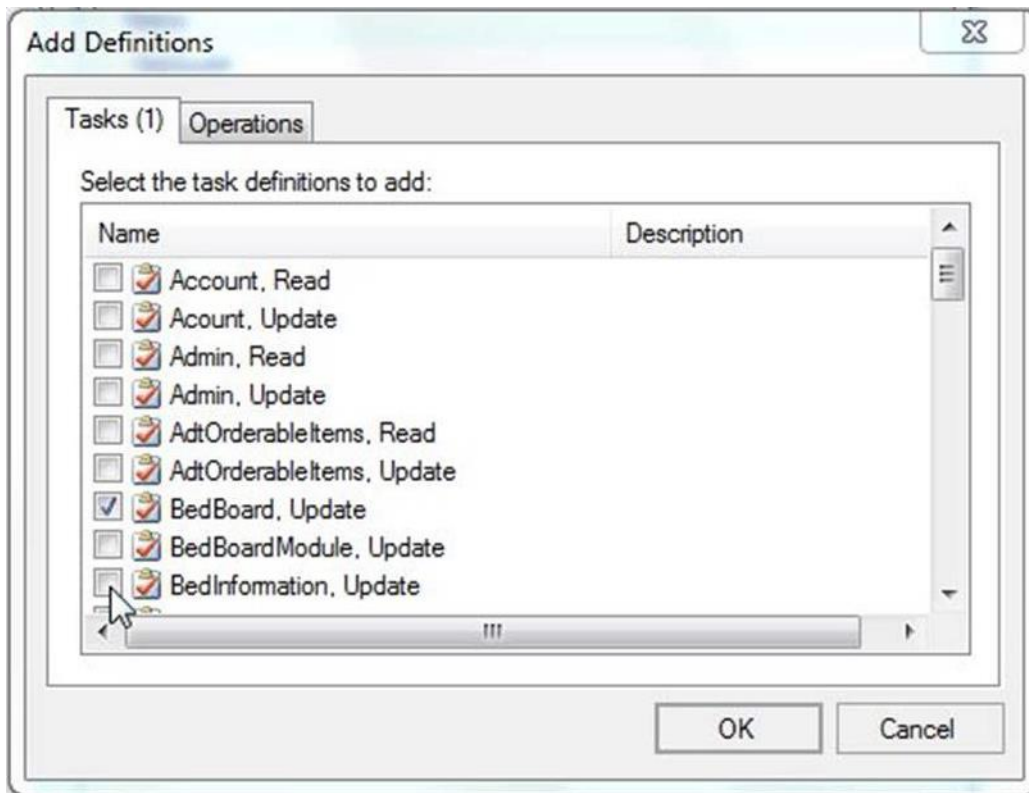


Figure 84-Adding Tasks and Operations to a Role

Tasks and operations that can be performed within the BMS system are available in separate tabs. Select the ones to be included in the definition of the current role (the number of selected tasks/operations will be displayed in the corresponding tab title) then press OK:

The selected tasks and operations will be displayed in the New Role Definition dialog box. Press OK to add the role to the list of roles defined for BMS: The Roles Definitions list will be updated to contain the new role. To add the new role to the Role Assignment folder, select the folder, right-click and select Assign Roles to display the following dialog window:

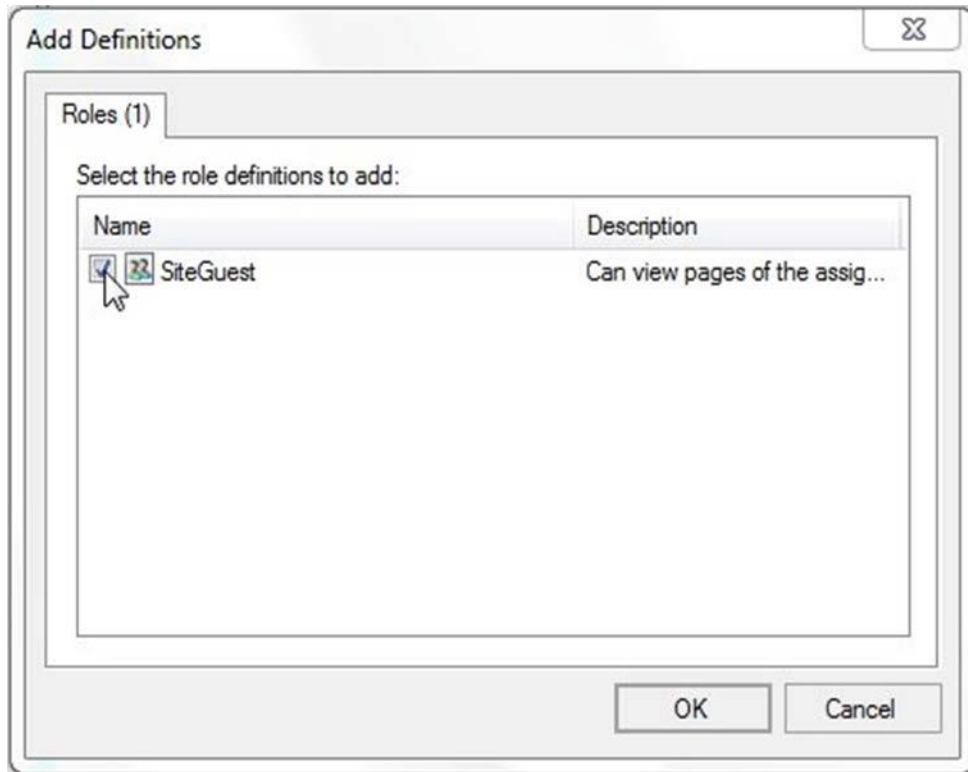


Figure 85-Add Role to Role Assignments List

Select the role then press OK: The newly added role will be displayed in the Role Assignments list and you will be able to assign the new role to BMS users.

7.7 Adding a New Task

To add a new task, click the Add Task button from the main Policy Manager window or right-click Task Definitions folder and select New Task Definition: The following dialog window is displayed:

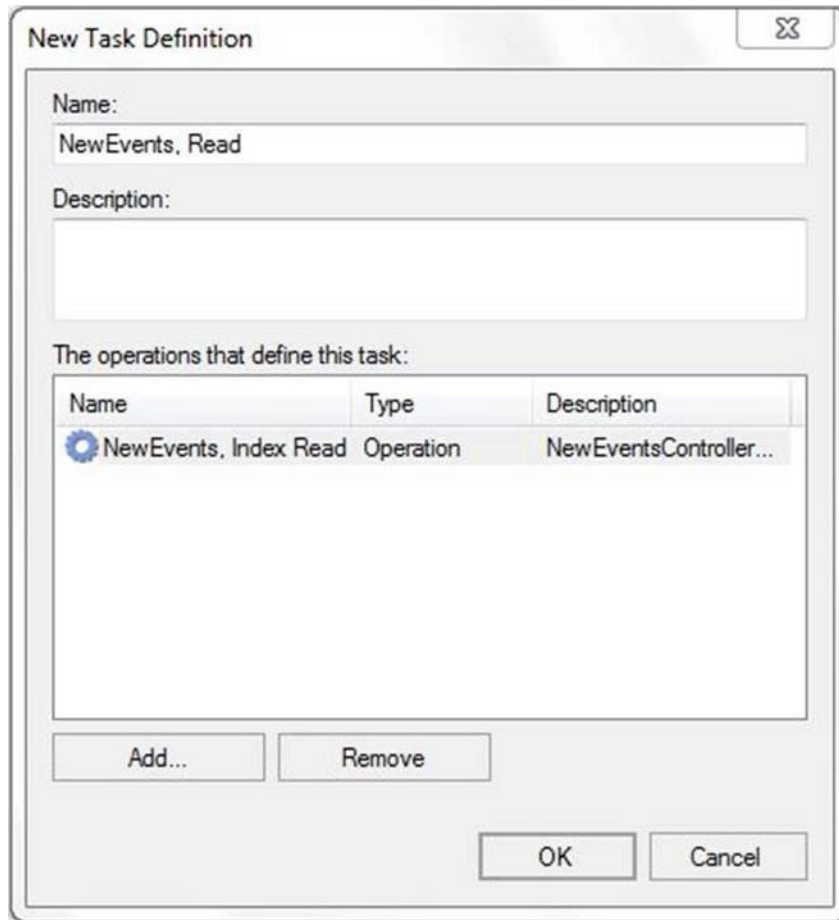


Figure 86-New Task Definition

Enter the name of the new task followed by read/write option and a short description.
To add the operations that define the Task, click the Add button to display the following dialog window:

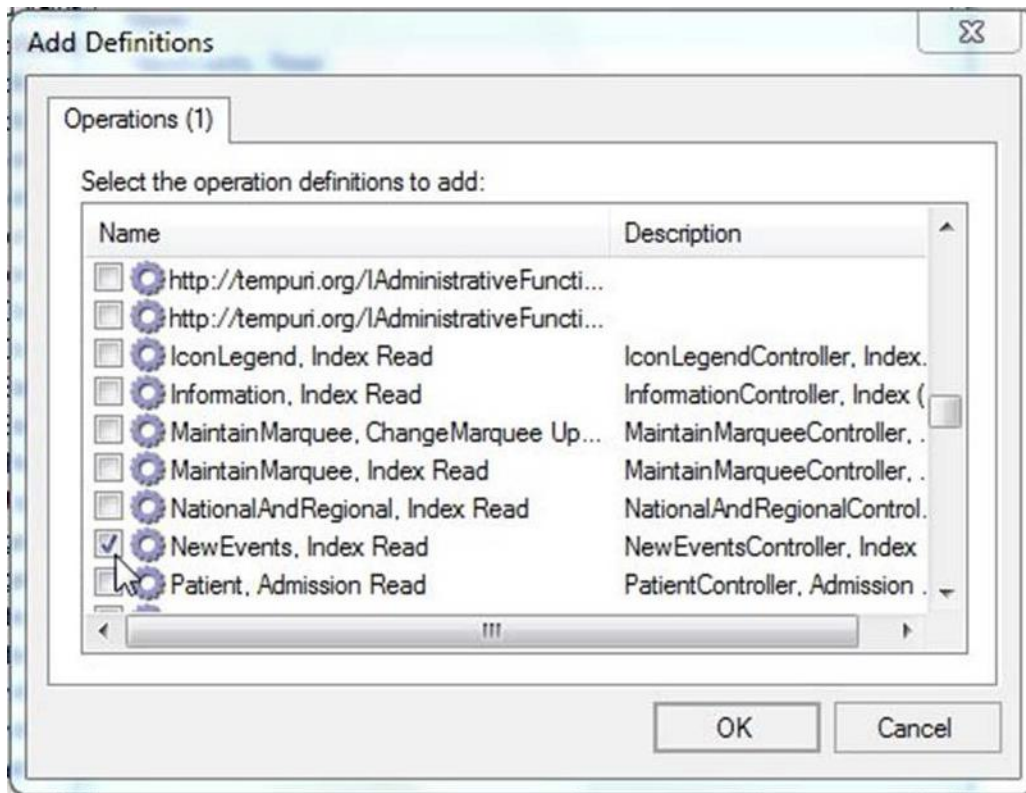


Figure 87-Adding Operations to a Task

Select the operations that define the selected task then click OK to return to the New Task Definition dialog box. Click OK to add the new task to the Task Definitions list.

7.8 Adding a New Operation

To add a new operation, click the Add Operation button from the main Policy Manager window or right-click Operation Definitions folder and select New Operation Definition: The following dialog window is displayed.

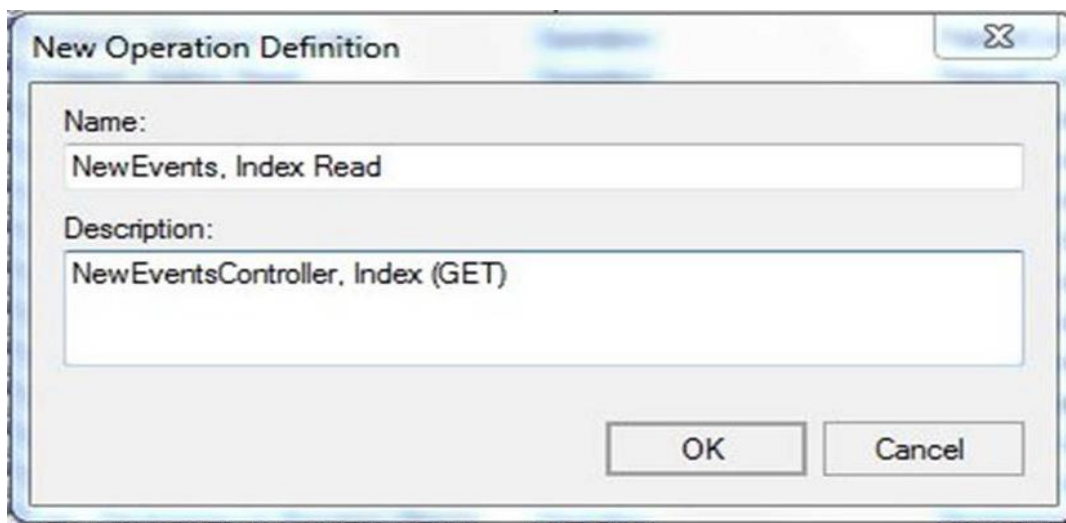


Figure 88-New Operation Definition

Enter the name of the new operation followed by read/write option and a short description. Click OK to add the new operation to the Operation Definitions list.

7.9 Business scenarios and use cases

Authentication

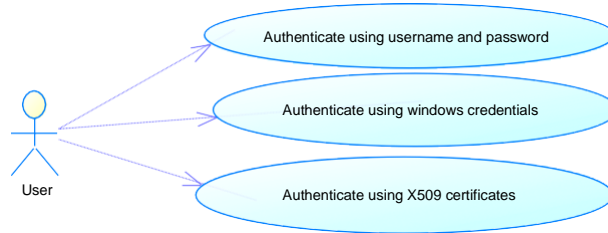


Figure 89-Authentication Use Cases

| Section | Description |
|-------------------------------|--|
| Use Case Name | User authentication |
| Summary | In the above diagram it is represented the methods that a client application can use to authenticate their users. |
| Preconditions | The users, that will use the client application, need to be defined in an Active Directory |
| Triggers | External |
| Basic course of events | <ol style="list-style-type: none"> 1. The client application will send the user and the password or windows credentials 2. The system verifies the login information. 3. The system returns the result of the verification to the client application. |
| Alternative paths | <ol style="list-style-type: none"> 1. The client application will send the X509 certificate of his user 2. The system verifies the certificate 3. The system returns the result |

Authorization



Figure 90-Authorization Use Cases

| Section | Description |
|-------------------------------|--|
| Use Case Name | User authorization |
| Summary | In the above diagram it is represented the methods that a client application can use to check if an authenticated user has access to a specified action on a resource. |
| Preconditions | The users, actions and resources must be defined in an Active Directory structure that the Security Service is using. |
| Triggers | External |
| Basic course of events | <ol style="list-style-type: none"> 1. The client application will invoke a check access method for a specified action on a specific resource 2. The system will find the actions that the requesting users has access 3. The system returns true/false if the action requested is among the users defined actions |

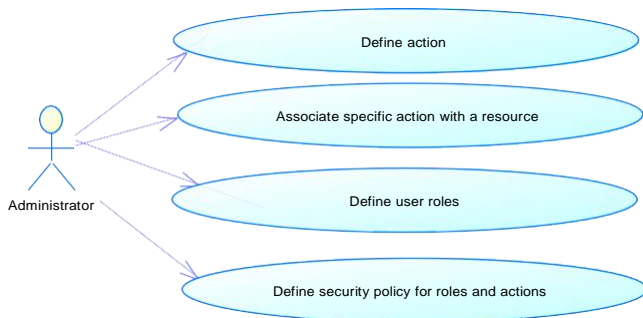


Figure 91- Authorization Administration Use Cases

| Section | Description |
|-------------------------------|---|
| Use Case Name | Action and resource management |
| Summary | Administrative console can define actions and resources and associate an action with a resource type. |
| Preconditions | The association method mandates that the action and the resource type should already be defined |
| Triggers | External |
| Basic course of events | <ol style="list-style-type: none"> 1. The client application will invoke a create action 2. The system will try to create requested action. 3. The system will fail if the specified action name already exists, or specified id already exists. |

| Section | Description |
|-------------------------------|---|
| Use Case Name | Role management |
| Summary | Administrative console can define user roles and associate users/user groups with roles. |
| Preconditions | The association method mandates that the role should already be defined |
| Triggers | External |
| Basic course of events | <ol style="list-style-type: none"> 1. The client application will invoke a create role 2. The system will try to create requested role. 3. The system will fail if the specified role name already exists, or specified id already exists. |

| Section | Description |
|----------------------|--|
| Use Case Name | Security policy management |
| Summary | Administrative console can associate users (groups of users) with roles. These roles are then associated with an action (operation). |
| Preconditions | The association method mandates that the action and the resource type should already be defined. |
| Triggers | External |

8 Detailed Functional Model on Each Interface

8.1 Service contracts

Authentication

The security service for authentication is represented by STS – security token cache that will issue a token whether the authentication succeeded, otherwise it will deny access to the application server. This STS Service will authenticate the user through WS-Security and validate application servers through WS-Trust using SAML v2.0 Token (Security Assertion Markup Language).

Authorization

The security services for authorization are represented by a PDP and PAP implementation. PDP stands for policy decision point where the authenticated user can check the permission for a specified action on a specified resource. PAP stands for policy administration point. Here an administrative console can define actions, resource-types, roles and make associations with them (define security policies) that will server for PDP. The PDP service exposes one method: CheckAccess, whilst PAP service has specific functions for policy administration.

Detailed functional model on each interface

STS – Security Token Service

- Authenticate

| | |
|-------------------------------|--|
| Business friendly name | User authentication |
| Description | The function decides if the user and the password supplied as parameters are valid. Will return true on success and false on any failure. |
| Inputs | Windows client credentials or Username – representing the username of the requested user. Password – the password of the requested user. |
| Outputs | True - on success False – on failure |

PDP – Policy Decision Point

- CheckPermission

| | |
|-------------------------------|---|
| Business friendly name | User authorization – check Access |
| Signature | <i>Message</i> CheckAccess (<i>Message</i> request); |
| Description | The function decides if the user has the privilege to access the specified action(s) on the specified resource. |
| Inputs | Username, operation name and resource id are encapsulated in the SAML Message class |
| Outputs | A Message containing the permit or deny result. |

PAP – Policy Administration Point

| Name | Description | Input | Output |
|-------------------------|--|---|---|
| AddRole | Adds a role | <i>String</i> name – name of the new role <i>String</i> description – role description | <i>String</i> – new role’s id |
| Delete Role | Delete a role | <i>String</i> id – role’s id | <i>String</i> – deleted role’s id |
| Update Role | Update a role | <i>String</i> id – role’s id <i>String</i> name – role’s name <i>String</i> description –role’s description | <i>bool</i> – operation result: <i>true</i> on succeeded; <i>false</i> if any error aroused |
| Update Task | Update a task | <i>String</i> id – task’s id <i>String</i> name –task’s name <i>String</i> description – task’s description | <i>bool</i> – operation result: <i>true</i> on succeeded; <i>false</i> if any error aroused |
| Update Operation | Update an operation | <i>String</i> id – operation’s id <i>String</i> name – operation’s name <i>String</i> description – operation’s description | <i>bool</i> – operation result: <i>true</i> on succeeded; <i>false</i> if any error aroused |
| IsChild | Verifies if the sent operation is part of a task | <i>String</i> id – operation id | <i>bool</i> – operation result |
| Assign User | Assign an user to a role | <i>String</i> userId – user’s id (SID) <i>String</i> roleId – role’s id | - |
| DeassignUser | Delete an association between an user and a role | <i>String</i> userId – user’s id (SID) <i>String</i> roleId – role’s id | - |
| Grant | Grant access to a | <i>string</i> resourceId, <i>string</i> actionId, | - |

| | | | |
|---|---|--|---|
| Permission | resource for a role on an action | <i>string</i> roleId | |
| Revoke Permission | Revokes a permission | <i>string</i> resourceId, <i>string</i> actionId, <i>string</i> roleId | - |
| GetRoles | Returns a list with all stored roles | <i>Bool</i> assignedOnly - returns assigned roles if parameter is true | <i>List<Role></i> - retrieved roles |
| Get Operations | Returns a list with all stored operations | - | <i>List<Operation></i> - retrieved operations |
| GetTasks | Returns a list with all stored tasks | - | <i>List<Task></i> - retrieved tasks |
| Add Operation | Add a new operation | <i>String</i> name – operation’s name <i>String</i> description – operation’s description | <i>String</i> id – operation’s id |
| Delete Operation | Delete an operation | <i>String</i> – operation’s id | - |
| AddTask | Add a new task | <i>String</i> name – task’s name <i>String</i> description – task’s description | <i>String</i> id – task’s id |
| Delete Task | Delete a task | <i>String</i> id – task’s id | - |
| Assign Operations | Associate operations to a task | <i>List<String></i> operationIds – list of operations to be assigned <i>String</i> taskId – task’s id | - |
| DeassignOperations | Deassign operations from a task | <i>List<String></i> operationIds – list of operations to be assigned <i>String</i> taskId – task’s id | - |
| GetTaskDefinition | Retrieve a list with all operations of the specified task | <i>String</i> id – task’s id | <i>List<DefinitionBase></i> - operation list |
| GetRole Definition | Returns all associated operations to a specified role | <i>String</i> roleId – role’s id | <i>List<DefinitionBase></i> - operation list |
| GetRole ByName | Returns a role by name | <i>String</i> name – role’s name | <i>Role</i> – returned role |
| GetRole ByName Excluding | Returns a role by name excluding the role id sent by parameter | <i>String</i> name – role’s name <i>Guid</i> id – role’s id | <i>Role</i> – returned role |
| GetTask ByName | Returns a task by name | <i>String</i> name – task’s name | <i>Task</i> – returned task |
| GetTask ByName ExcludingId | Returns a task by name excluding the task id sent by parameter | <i>String</i> name – task’s name <i>Guid</i> id – task’s id | <i>Task</i> – returned task |
| Get Operation ByName | Returns an operation by name | <i>String</i> name – operation’s name | <i>Operation</i> – returned operation |
| Get Operation ByName ExcludingId | Returns an operation by name excluding the operation id sent by parameter | <i>String</i> name – operation’s name <i>Guid</i> id – operation’s id | <i>Operation</i> – returned operation |
| Get Permissions By Resource Type | Returns a list with operations/task associated with a resource type | <i>String</i> resourceType – Resource type | <i>List<DefinitionBase></i> – operation/task list |
| GetPolicy | Returns a list with all roles and operations associated with the resource | <i>String</i> resourceId – resource’s id | <i>List<Role></i> – role list. Each role has the associated operations. |

| | | | |
|--|---|---|--|
| GetRole Users | Returns a list with all users associated to a specific role | <i>Guid</i> roleId – role’s id | <i>List<User></i> – user list |
| Assign Role | Marks a role as assigned | <i>Guid</i> roleId – role’s id | - |
| Deassign Role | Marks a role as unassigned | <i>Guid</i> roleId – role’s id | - |
| Get Connected RolesAndOperations | Returns a list with all roles and operations associated with the resource | <i>String</i> resourceId – resource’s id | <i>List<Role_Operation></i> – list with role-operations associations |
| Clear Permissions For Resource | Removes all permissions for a certain resource (all associations to this resource) | <i>String</i> resourceId – resource’s id | - |
| Delete PermissionFor Resource And Operation | Deletes a permission form a role based on the resource and operation sent. | <i>String</i> resourceId – resource’s id <i>String</i> roleId – role’s id <i>String</i> actionGUID – operation’s id | - |
| Insert PermissionFor Resource And Operation | Creates a permission for a certain role and an operation on a resource. It automatically creates the association within the permission and the operation if it doesn’t exist. | <i>String</i> resourceId – resource’s id <i>String</i> roleId – role’s id <i>String</i> actionGUID – operation’s id | - |

The security services do not expose a fault contract as usual web services do. Instead, these services deliver information about any issue in processing the request in the return message of the service call (such as authentication error, authorization error etc.).

Data contracts

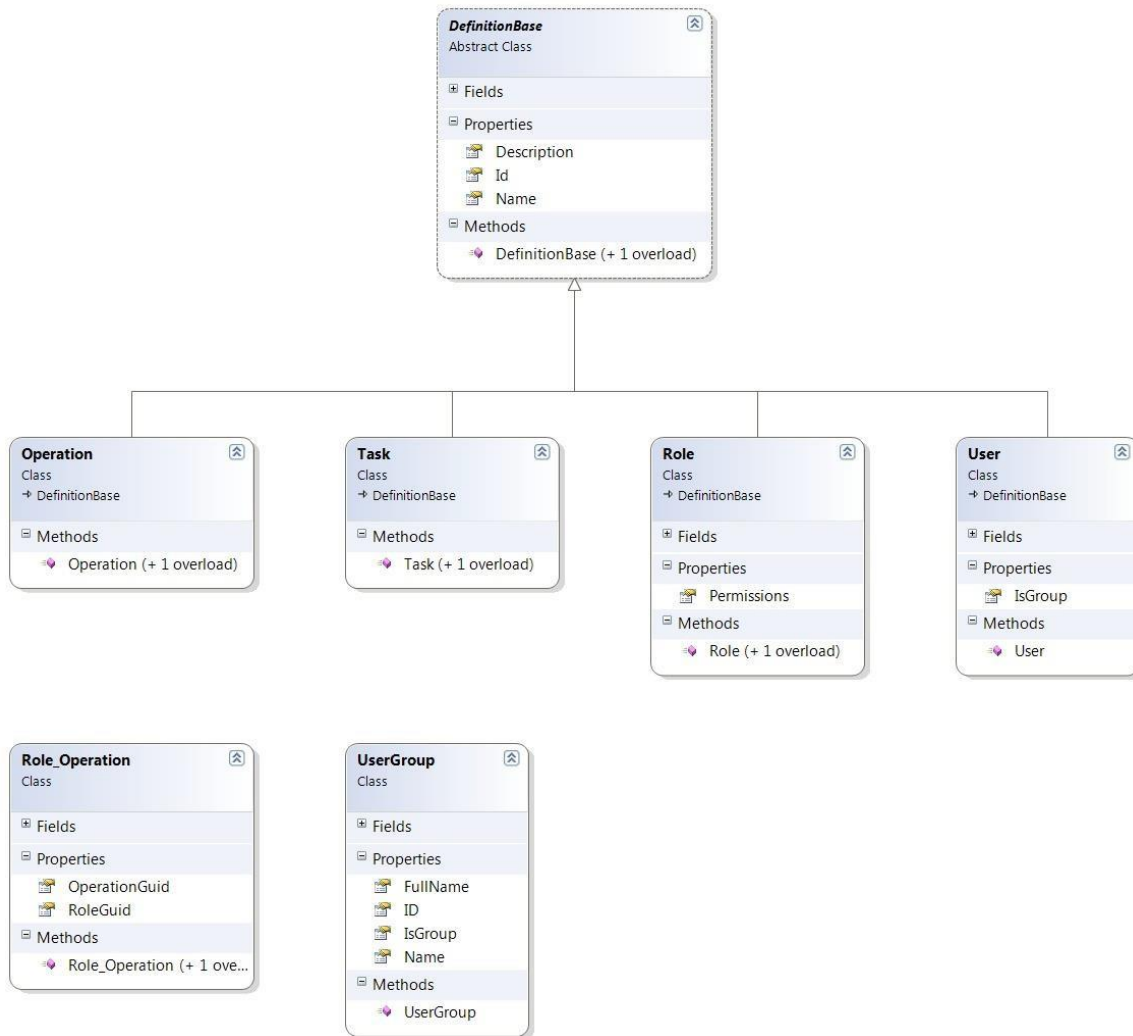


Figure 92-Class Diagram for Data Contracts in PAP and PDP

8.2 BMS Roles

BMS users fall under the following categories:

Administrators: This type of user will customize the BMS settings according to the needs of a facility. They will have access to the Site Options pages. This role refers to a group of users whose members are the person(s) responsible for setting up BMS options for the current facility.

AuditLogUsers: This type of user will have access to Audit Log Report. This role cannot be used alone, only together with another role.

EmsStaff: The EMS group of users will be allowed to edit and update the bed cleaning process but not the other parts of the bed board. Any member of your EMS staff that will be interacting with BMS must be in this group.

EMSSupervisorUsers: The EMS supervisor group of users will be allowed to view the requests for bed clean

operations, to filter existing requests by different criteria and to select requests in order to assign them to EMS staff. This role cannot be used alone, only together with EmsStaff role.

Guests: The guest user will be allowed to generate the National Bed Availability report from National/Regional page.

National Users/Regional Users: This type of user will have access to the National/Regional page only.

Site Users: This type of user only has access to the BMS facility page.

Support Users: This type of user will have access to the Administrative page of the BMS solution. They configure the sites for the BMS facilities and grant access and read/write rights to the users.

VISN Users: This type of user will have access to the pages of different facilities within the VISN where they have been granted access.

9 Troubleshooting

This section contains information on common issues with using BMS solution and how those may be resolved.

Symptom 1

When you try to load the BMS application, one of the following error messages appear:

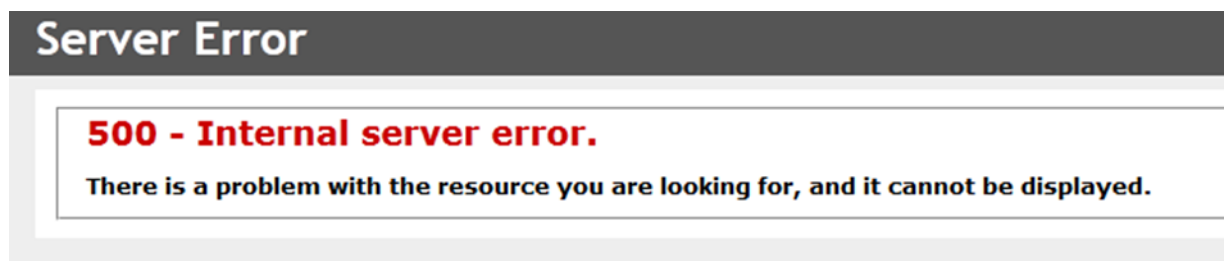


Figure 93-500 Server Error

Problem

IIS is not started/running.

Diagnoses and Solutions

Start the IIS Manager and check if the Application Pool Identity is set to the correct service account. (). Verify the BMS pool is started, If stopped right click on the BMS, Select 'Start'.

Verify the Site 'BMS' is started. If not select 'BMS' under the Site folder in IIS Manager, select 'Start' from the 'Manage Web Site' panel on the right side of the IIS Manager.

Symptom 2

When trying to load the BMS application, one of the following error messages appears:



Figure 94-No Facilities Error

Diagnoses and Solutions

Go to the MULx5 machine and check if the BMS.ServiceHost service is stopped. Start the services.msc console and start the service.

Verify the service started.

Symptom 3

When trying to load the BMS application, one of the following error messages appears:



Figure 95-Unhandled Exception

Diagnoses and Solutions

- Check if BMS.BMSservice service is stopped or SQL Server might also have stopped.
- Go to the SQL Server machine and start the SQL Server from the SQL Server Configuration Manager. Verify if the connection string to the database server is set properly.
- Then go to the services' machine, start the services.msc console and start the BMS.BMSservice service.

Symptom 4

When trying to log-in to the BMS application, the following error is displayed:

Login was unsuccessful. Please correct the errors and try again.
• There was an error when trying to login: There was no endpoint listening at http://testaresoft2:17050/BMSConfigurationOperations that could accept the message. This is often caused by an incorrect address or SOAP action. See InnerException, if present, for more details.

| Login | |
|---|--|
| User name: | bmsuser |
| Password: | ***** |
| Facility (Required) | ALBANY (520A8, ALN) ALBUQUERQUE (501, ABQ) ALTOONA (503, ALT) AMARILLO (504, AMA) ANCHORAGE (463, ANC) ANN ARBOR (506, ANN) ASHEVILLE (637, ASH) AUGUSTA (509, AUG) BALTIMORE (512, BAL) BATH (528A6, BAN) BATTLE CREEK (515, BAC) BAY PINES (516, BAY) BECKLEY (517, BEC) BEDFORD (518, BED) BIG SPRING (519, BIG) BILOXI (520, BIL) BIRMINGHAM (521, BIR) BOISE (531, BOI) BROCKTON (523AS, BRX) BRONX (526, BRX) |
| Connect | |
| Go To Facility Bed Cleaning Page (EMS Staff Only) | |

Figure 96-Login Unsuccessful

Diagnoses and Solutions

Check if BMS.BMSservice service is stopped. Go to the services' machine, start the services.msc console and start the service.

Symptom 5

Data does not appear in the reports. Data does not get refreshed in the reports.

Diagnoses and Solutions

In SQL Configuration Manager, check if the SQL Server Agent is started, and if it isn't start it; then, in the SQL Server Management Studio, check if the *BMS - Reports Full* and *BMS - Reports Incremental* are deployed and run without errors. If the jobs are not deployed, install them.

Symptom 6

A report is missing from Other Reports section on the Facility Home Page (e.g. *EMS Bed Status Report (Admin)*).

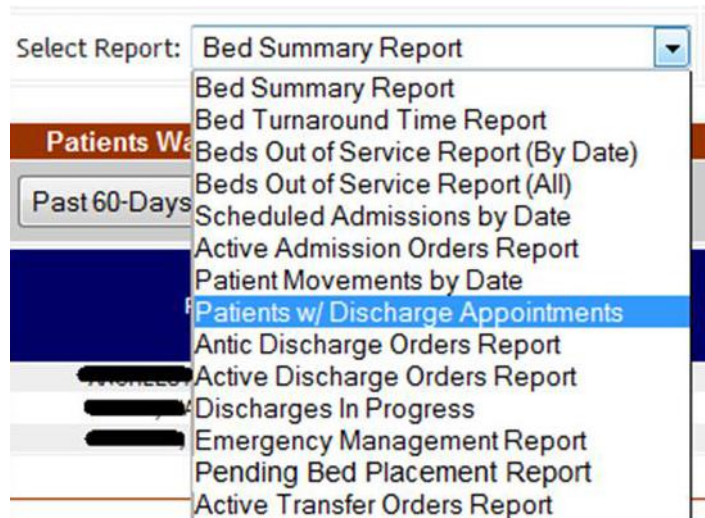


Figure 97- EMS Bed Status Report is Missing

Diagnoses and Solutions

Check if the report is missing from the SQL Server Reporting Services. Go to the management web page and add the missing report (Upload File).

Symptom 7

When trying to view one of the reports (other than the *Other Reports*) the following error appears:

[Return to Previous Page](#)



Figure 98- Report Cannot be Found

Diagnoses and Solutions

Check if the mentioned report is missing from the Reporting Services. Go to the management web page and add the specified report.

BMS Log Files

There are five log files available to anyone supporting the BMS system, the **WinServiceHost**, the **SecurityHost**, the **BMS.ServiceHost**, the **BMS.VI.ServiceHost** and the **WebTrace log**.

- The WinServiceHost log file is named BMS-Services.log and its location is on the application server (vausbmsmulx5) D:\BMS\Bin.
- The SecurityHost log file is named BMS-Security.log and its location is on the application server

(vaausbmsmulx5) D:\BMS\Bin.

- The BMS.ServiceHost logfile is named BMS.trace.log and its location is on the application server (vaausbmsmulx5) at D:\BMS\Bin\BMS.
- The BMS.VI.ServiceHost logfile is named BMS.VI.trace.log and its location is on the application server (vaausbmsmulx6) at D:\BMS\Bin\BMS.
- The Web trace log is named WebTrace.log and its location is on the web server (vaausbmswebx5) at D:\BMS\BMS.Web.

These logs contain various types of information (informational, warnings, and errors) with the exception of the web trace log, which only contains error messages.

There is no log file for MDWS, those errors are captured through our integration calls and posted in the BMS.ServiceHost log file (Trace.log). These are bit trickier to debug as in any attempt requires the exact parameters to be passed to MDWS.

10 Appendix A – BMS Diagrams

10.1 Business Process Diagrams

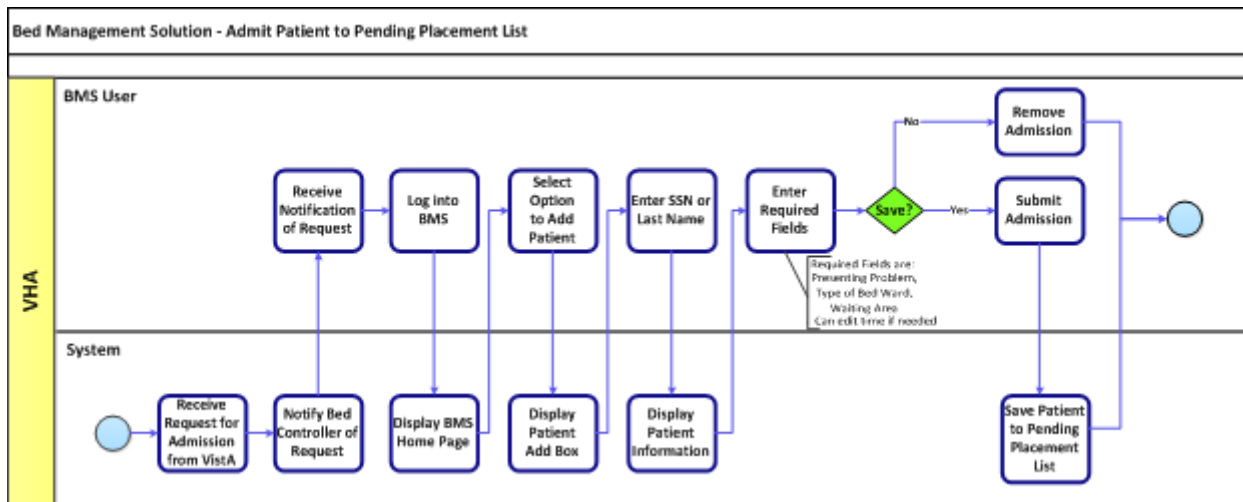


Figure 99-Admit Patient to PPBP Business Process

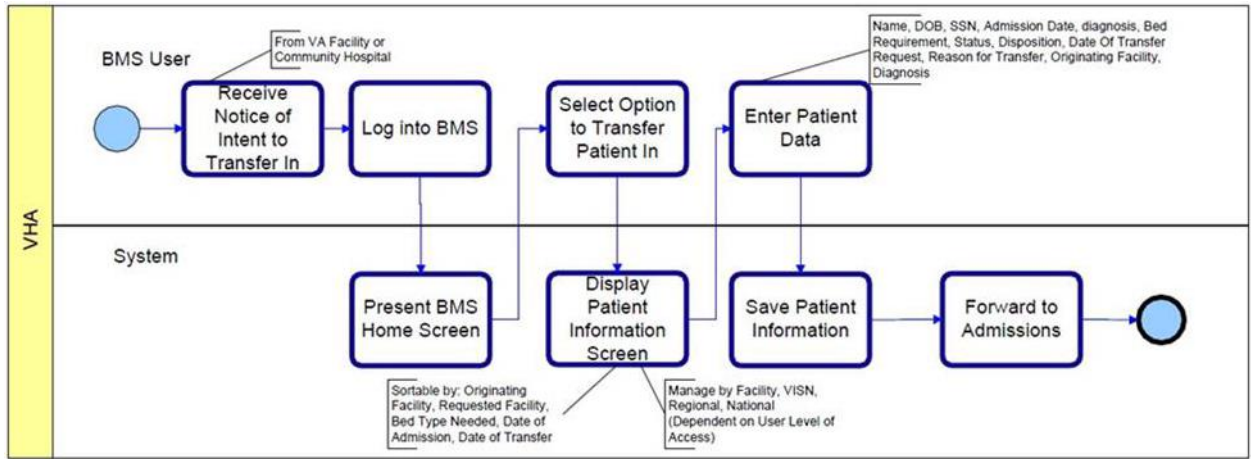


Figure 100-Transfer Patients to PPBP Business Process

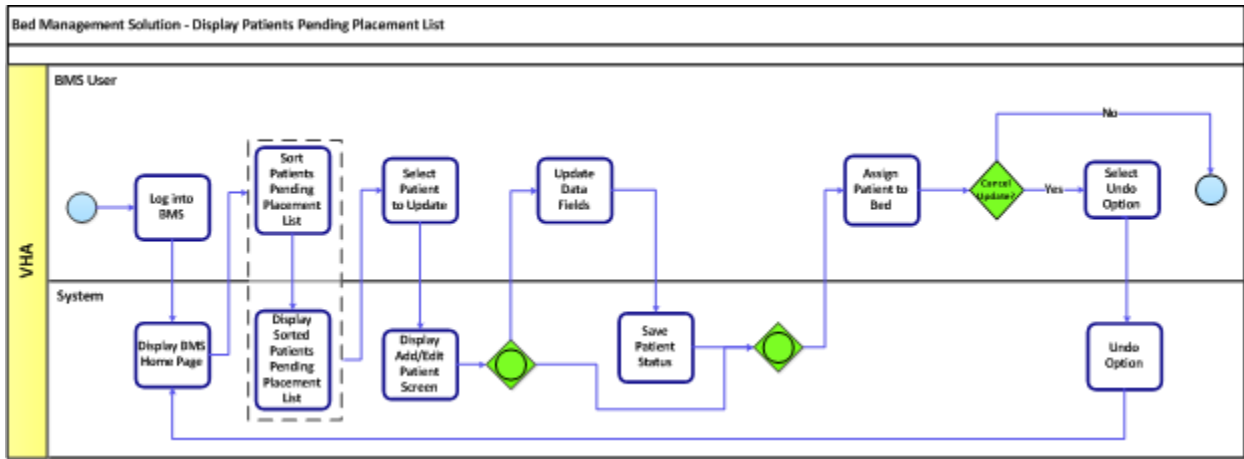


Figure 101-Display and Update PPBP Business Process

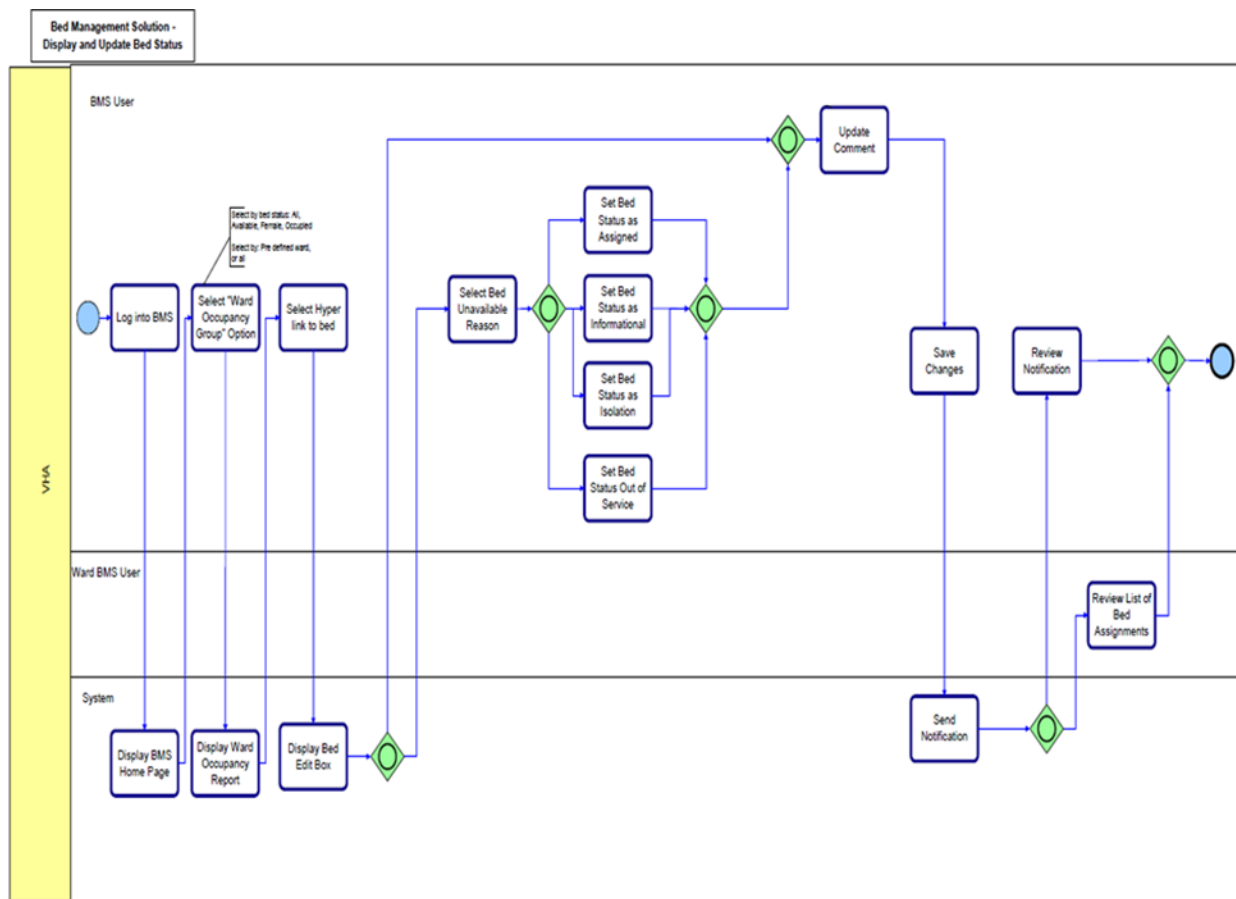


Figure 102-Display and Update Bed Status Business Process

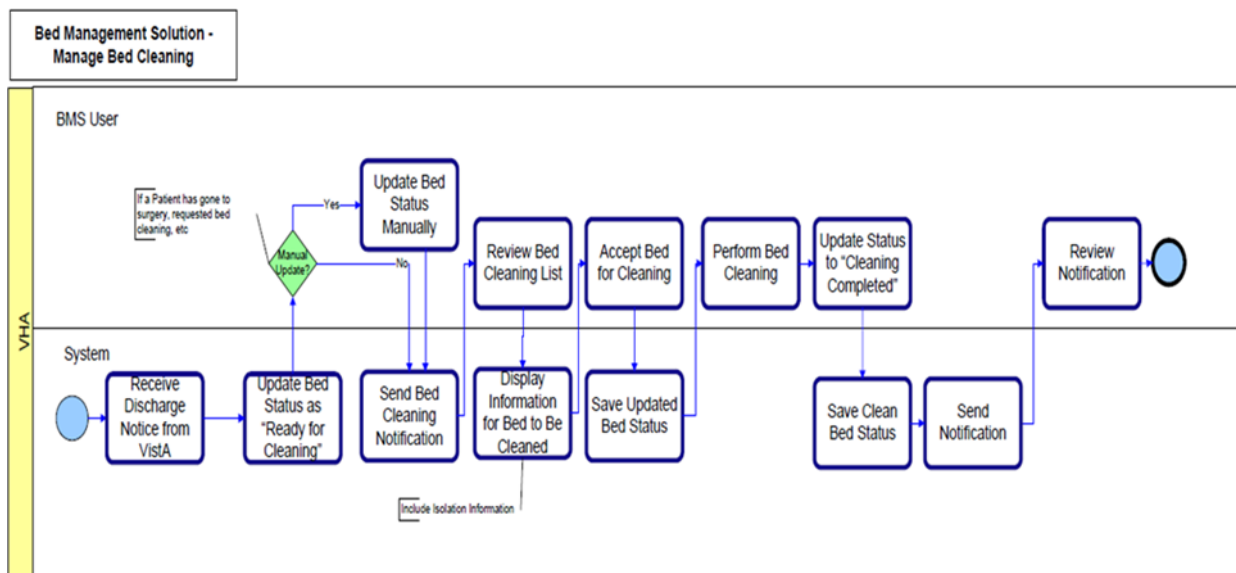


Figure 103-Manage Bed Cleaning Business Process

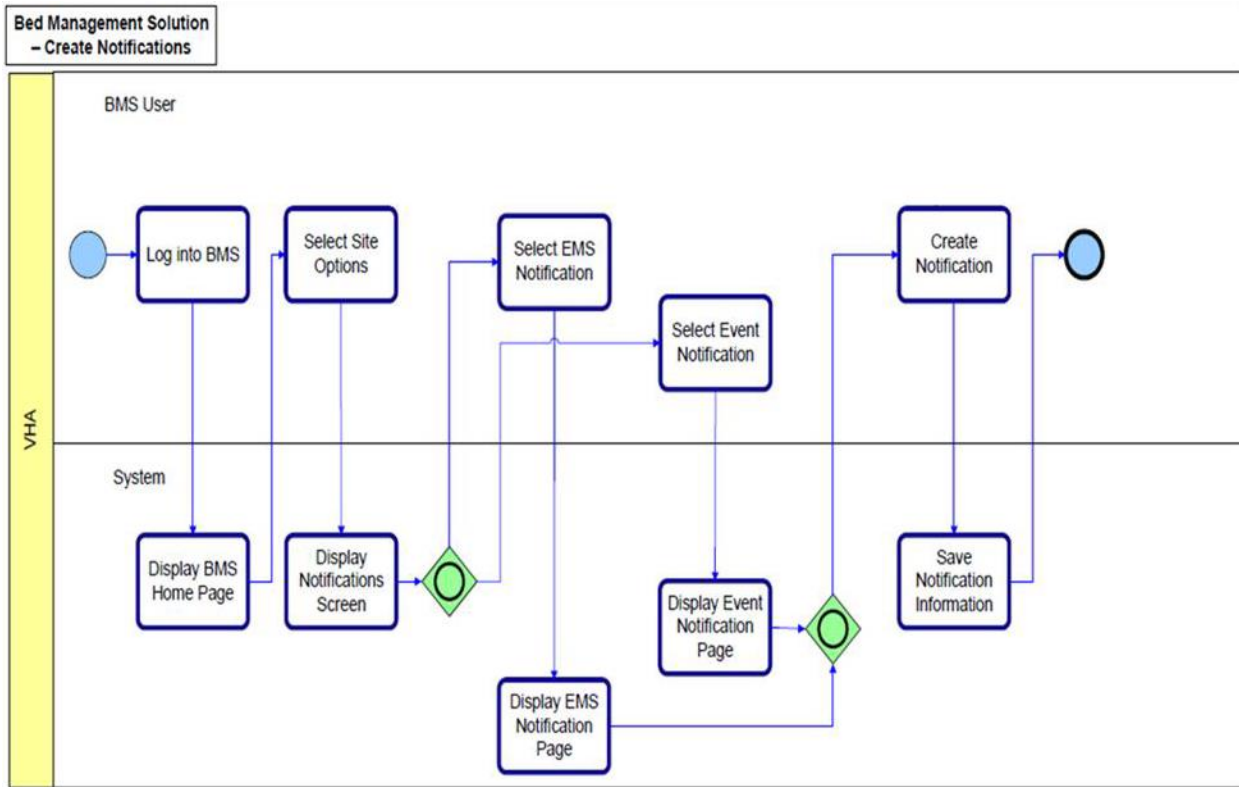


Figure 104-Create Notification Business Process

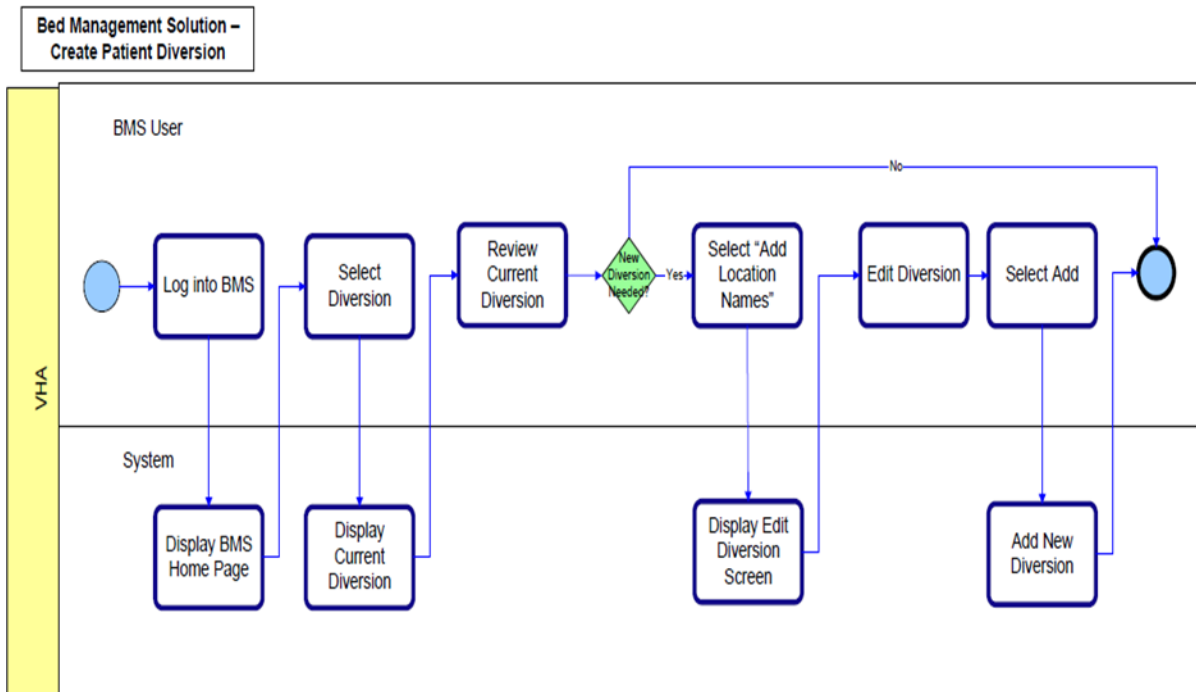


Figure 105-Create Facility Diversion Business Process

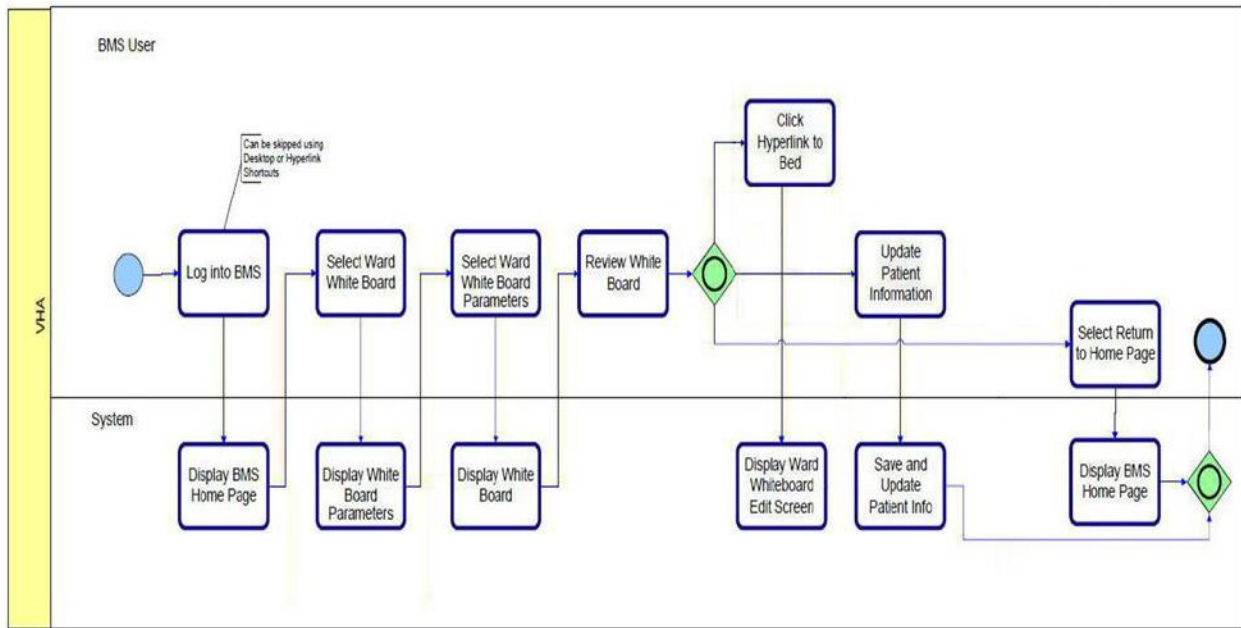


Figure 106-Manage Whiteboard Business Process

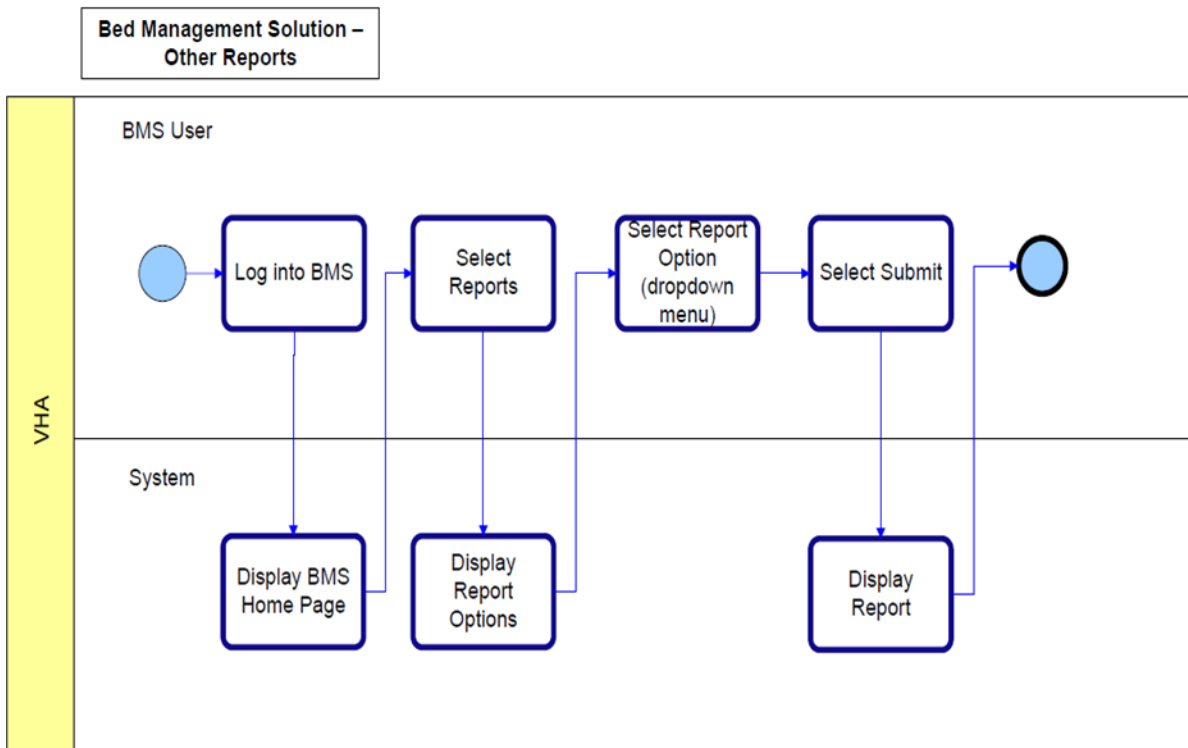


Figure 107-Reports Business Process

10.2 Activity Diagram

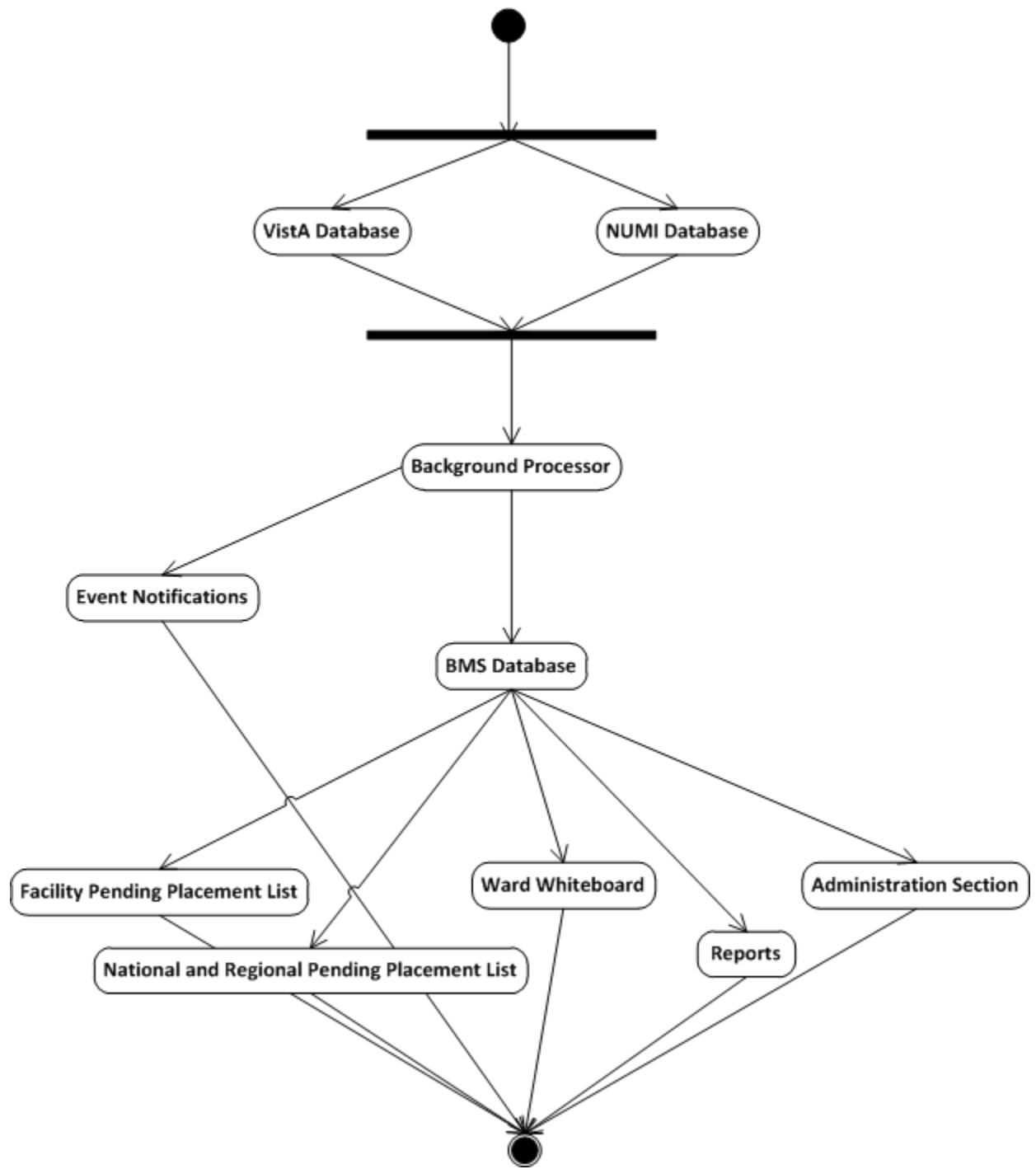


Figure 108-BMS Overview Activity Diagram

10.3 Functional Flow Diagram

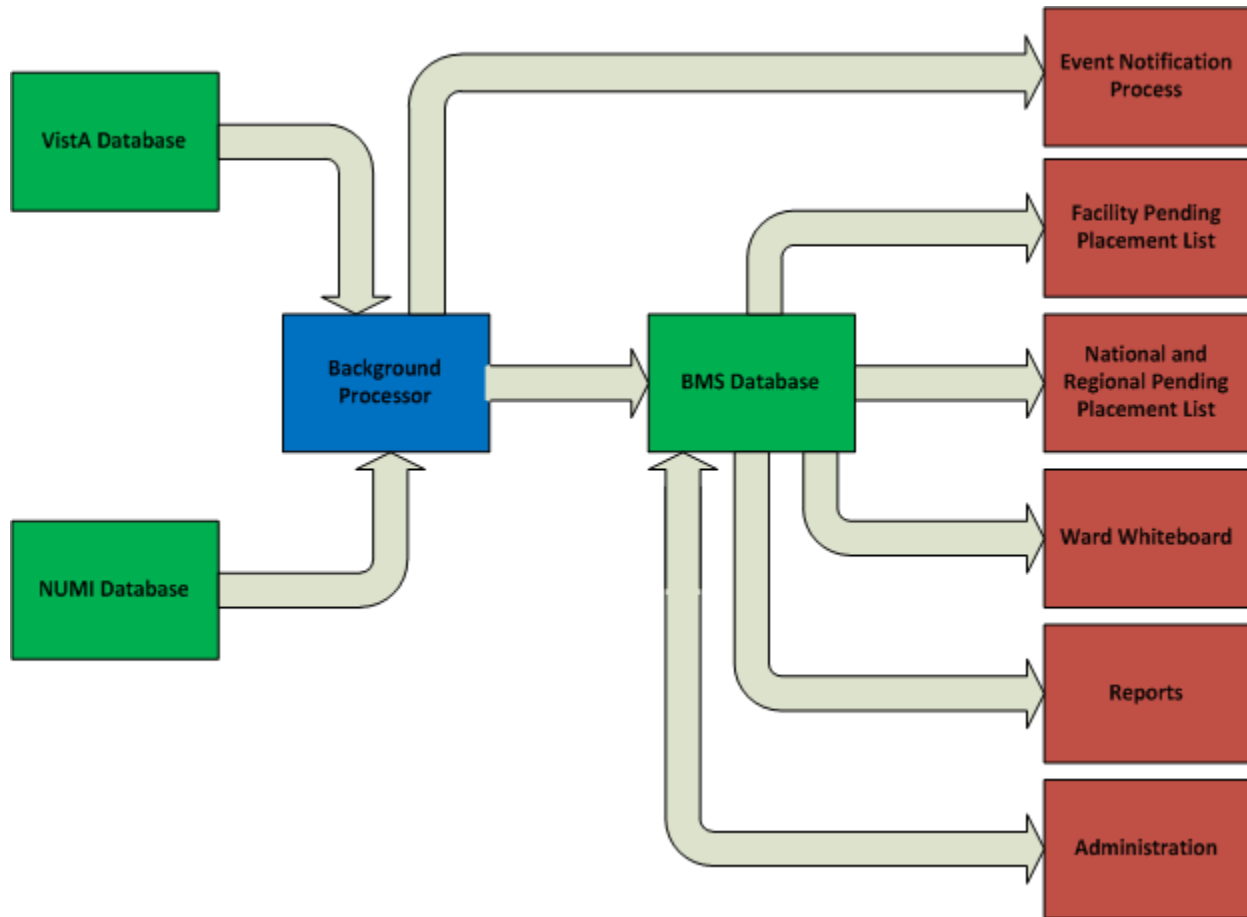


Figure 109-BMS Overview Functional Flow Diagram

9.4 Data Flow Diagram

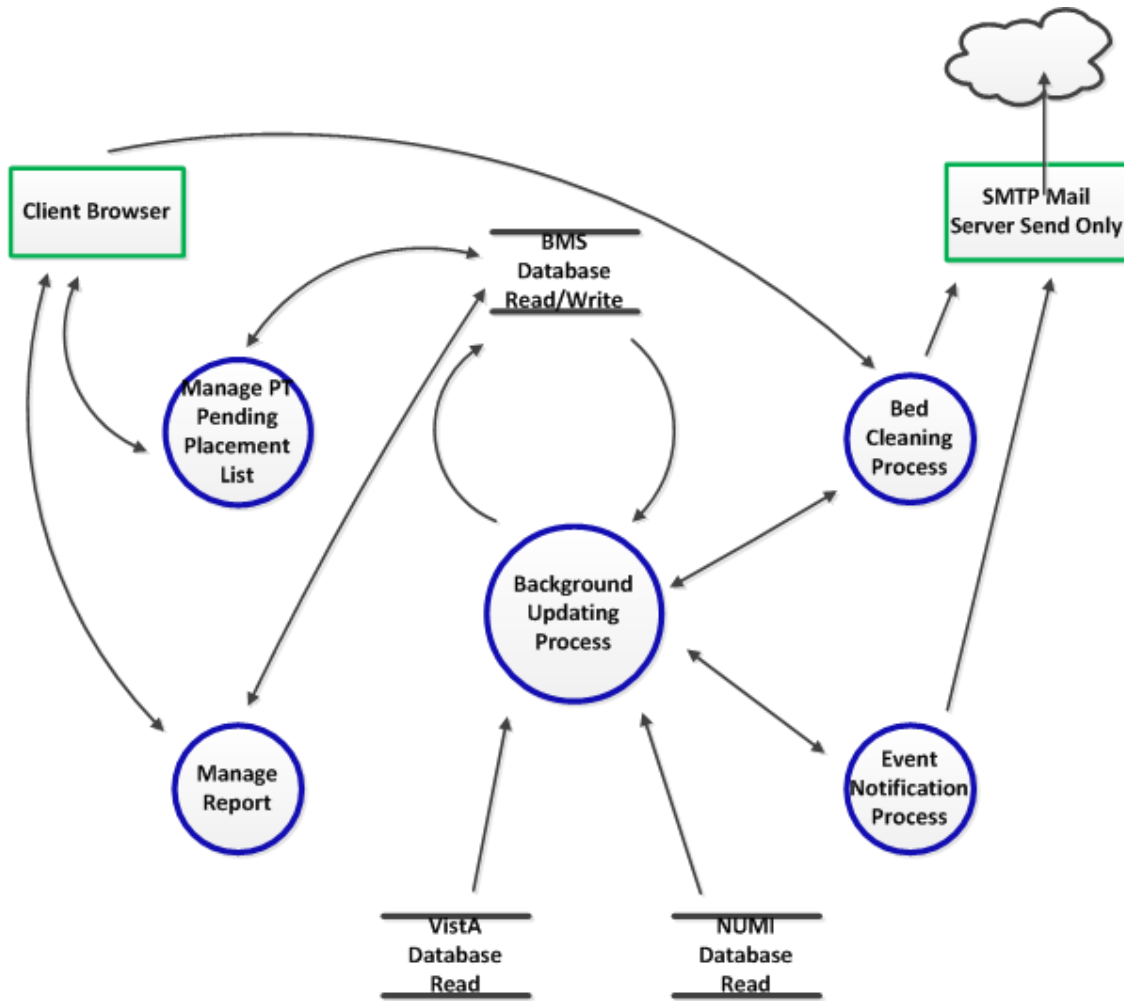


Figure 110-BMS Overview Data Flow Diagram

9.5 Application Flow Map from APPDYNAMICS

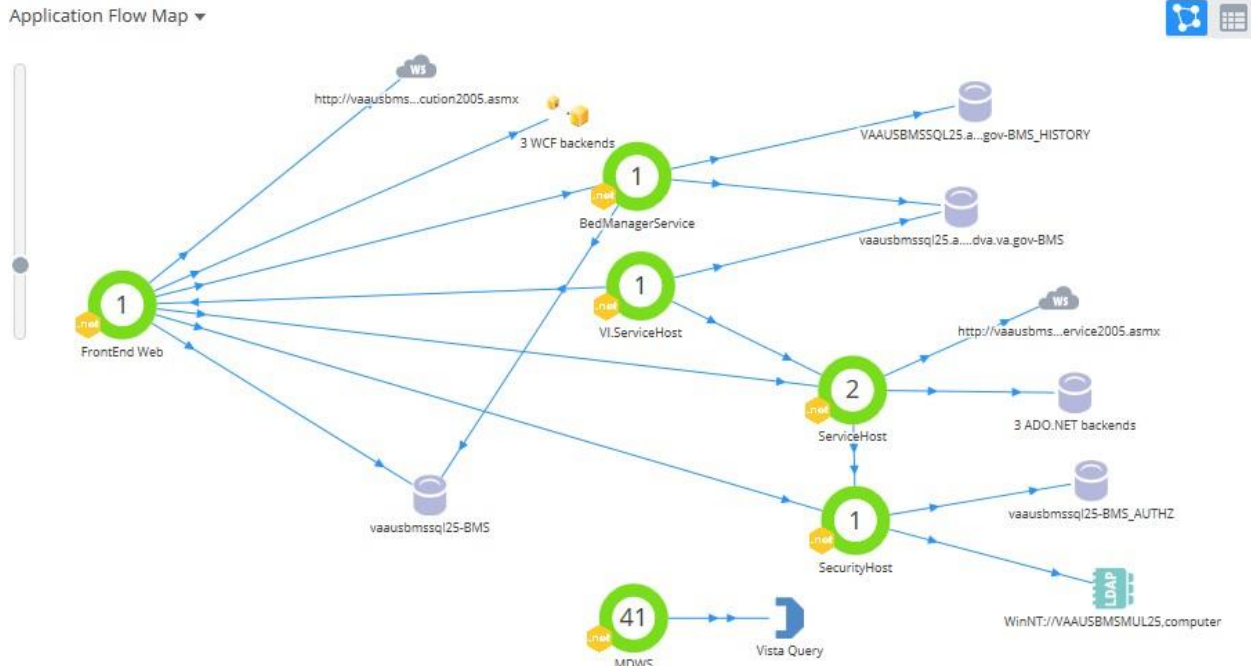


Figure 111-Application Flow map from APPDYNAMICS

11 Appendix B - Terms, Acronyms, and Abbreviations

Table 29-Terms, Acronyms, and Abbreviations

| Terms, Acronyms, Abbreviations | Definitions |
|--------------------------------|---|
| ASP | Active Server Pages |
| BMS | Bed Management Solution |
| CRUD | Create, Read, Update, Delete |
| EIS | Entity Identification Service |
| EMS | Environmental Management Service |
| ETL | Extract Transform Load |
| EVS | Enterprise Vocabulary Service |
| IE | Internet Explorer |
| IIS | Internet Information Services |
| IRM | Information Resources Management |
| MDO | Medical Domain Objects |
| MDWS | Medical Domain Web Services |
| MVC | Model-View-Controller |
| NUMI | National Utilization Management Integration |

| | |
|-------|---|
| ODBC | Open Database Connectivity |
| PAP | Policy Administration Point |
| PPBPL | Patients Pending Bed Placement List . A list of patients in need of beds at VA facilities |
| PDP | Policy Decision Point |
| RS | Reporting Services |
| SOA | Service Oriented Architecture |
| SQL | Structured Query Language |
| STS | Secure Token Service |
| URI | Uniform Resource Identifier |
| URL | Uniform Resource Locator |
| VA | Department of Veterans Affairs |
| VAMC | VA Medical Center |
| VIA | Vista Integration Adapter |
| VISN | Veterans Integrated Service Network |
| VistA | Veterans Health Information Systems and Technology Architecture |
| WCF | Windows Communication Foundation |
| XAML | Extensible Application Markup Language |
| XML | eXtensible Markup Language |
| WMI | Windows Management Instrumentation |