

Oracle® Retail Macro Space Planning

Installation Guide

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Contents

Send Us Your Comments	ix
Preface	xi
Audience	xi
Documentation Accessibility	xi
Related Documents	xi
Customer Support	xi
Review Patch Documentation	xii
Improved Process for Oracle Retail Documentation Corrections	xii
Oracle Retail Documentation on the Oracle Technology Network	xii
Conventions	xii
1 Getting Started	
Interrelationship between Macro Space Management and In-Store Space Collaboration	1-1
Overview of Typical Infrastructures	1-2
Installing Macro Space Management and In-Store Space Collaboration.....	1-2
About the Server Infrastructure	1-3
About Macro Space Management Users (except Planner Users).....	1-3
About In-Store Space Collaboration and Planner Users	1-3
Software Architecture	1-4
Reference Files	1-5
Macro Space Management Store Planning Modules	1-6
Macro Space Management Support Modules.....	1-6
Macro Space Management Batch Tools	1-6
Macro Space Planning Server Application.....	1-7
Macro Space Planning Server Log Information.....	1-7
In-Store Space Collaboration Client Application	1-7
In-Store Space Collaboration Mobile (ISSC Mobile) Application	1-7
Steps for Installing Macro Space Management	1-7
Steps for Installing Macro Space Management and In-Store Space Collaboration	1-8
Reports	1-8
Windows Display Settings	1-9
2 Planning Your Installation	
Implementation Capacity Planning	2-1

Planning Your Environment	2-2
Planning for Optimal Macro Space Planning Performance	2-2
Supported Configurations and Requirements	2-2
AutoCAD Requirements	2-2
Server Requirements.....	2-2
Database Server	2-3
ISSC Application Server	2-3
Batch Server	2-3
File Server	2-4
LAN Client Workstation Requirements	2-4
In-Store Space Collaboration User System Requirements	2-4
In-Store Space Collaboration Mobile (ISSC Mobile) User System Requirements	2-5

3 Setting Up the Database

User Names and Passwords	3-1
Installing the Database Software	3-1
Creating an Application Database	3-2
Creating the Database Master User Account	3-2
Installing the Template Database	3-3
Using the Upgrade Scripts	3-4
General Principles of Roles and Synonyms	3-5
Master User	3-5
Working with Roles and Synonyms.....	3-6
Setting up a User with Roles and Synonyms	3-7
Master User	3-7
Application Requirements	3-7
Macro Space Management.....	3-8
In-Store Space Collaboration	3-8
Creating an MSP User	3-8
Creating the Roles	3-8
Creating the MSP User	3-10
Assigning the Synonyms	3-10

4 Setting Up AutoCAD

Installing AutoCAD	4-1
Upgrading to Later Versions of AutoCAD	4-1
Creating a Registry Entry	4-1

5 Removing Previous Versions of the Software

Base Releases and Patches	5-1
Updating AutoCAD in parallel with Macro Space Management.....	5-1
Backing Up Data Folders	5-2
Removing Previous Versions of Macro Space Planning	5-2
Uninstalling ISSC Mobile	5-3
Problems with installing a later version of a Patch Release.....	5-3

6 Installing Macro Space Management

Before You Begin	6-1
Installation Options	6-1
Full Application.....	6-1
Batch Tools.....	6-1
System Requirements	6-2
Previous Installation	6-2
User Access Privileges.....	6-2
User Names and Passwords	6-2
Installing and Updating the Macro Space Management Application	6-3
Locations to Install Macro Space Management	6-3
Installation of Macro Space Management Application	6-3
Setting up the Connection to the Database	6-5
Options for Setting up the Connection	6-7
Logging in to the Application for the First Time	6-7

7 Upgrading from Previous Installations

Changing Settings in the Configuration Module	7-1
Changing the Local Directory Paths.....	7-1
Steps to Change Directory Paths	7-1

8 Changing Settings in Planner

Getting the Menus and Toolbars to Display	8-1
Changing the Drawing Template	8-4

9 Security Options

Deciding on the Security Options	9-1
Updating Passwords	9-3

10 Installing the MSP Server

Oracle Database Client	10-1
Before You Begin	10-1
Location to Install Files.....	10-2
Previous Installation	10-2
Upgrading the Client.....	10-2
Security Advisories	10-2
TCP/IP.....	10-2
User access rights	10-2
Windows Firewall Consideration	10-3
Installing the Macro Space Planning Server	10-3
Setting up the Connection to the Database	10-3
Options for Setting up the Connection	10-5
Setting Up the Macro Space Planning Server	10-5
Overview of Connections.....	10-5
Configuring the MSPServer.exe.config File	10-6

system.serviceModel Element.....	10-7
applicationSettings Element.....	10-8
Configuring the Service.....	10-8
Starting the Service	10-10
11 Installing the ISSC Client	
Before You Begin	11-1
Previous Installation	11-1
Upgrading the Server Service	11-1
Security Advisories.....	11-1
TCP/IP.....	11-1
User access rights	11-2
Firewall Considerations	11-2
Installing the In-Store Space Collaboration Client	11-2
Setting Up the ISSC Client	11-2
12 Installing the ISSC Help	
Before You Begin	12-1
Previous Installation.....	12-1
Third Party Software Requirements.....	12-1
Security Advisories.....	12-1
User Access Rights.....	12-2
Database Permissions.....	12-2
Windows Firewall Consideration	12-2
Installing the Online Help	12-2
Configuring the path to the In-Store Space Collaboration Help	12-3
13 Opening ISSC for the First Time	
Overview of Opening ISSC for the First Time	13-1
Access to the ISSC Toolbar.....	13-1
Access to Stores and Floor Plans.....	13-1
Giving Access to Stores	13-2
Giving access to Floor Plans	13-2
14 Installing ISSC Mobile	
Introduction	14-1
Configuring the ISSC Server Service	14-1
Overview of ISSC Mobile Installation	14-1
Setting up the MAF Mobile Environment	14-1
Importing the .maa File.....	14-2
Configuring the Server Address	14-2
Creating a White List.....	14-2
Deploying to the Mobile Device	14-3
Enterprise Installation Order	A-1

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Oracle Retail Macro Space Planning Installation Guide, Release 14.1.2

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Preface

The *Oracle Retail Macro Space Planning Installation Guide* describes the requirements and procedures to install this Oracle Retail Product release.

It provides step-by-step instructions to install the Oracle Retail Macro Space Management and In-Store Space Collaboration application and extension, along with the required server-side components.

Audience

This User Guide is for users and administrators of Oracle Retail Macro Space Planning. This includes merchandisers, buyers, business analysts, and administrative personnel.

Documentation Accessibility

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Related Documents

For more information, see the following documents in the Oracle Retail Macro Space Management documentation set:

- *Oracle Retail Macro Space Management Addendum Guide*
- *Oracle Retail Macro Space Management Release Notes*

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When contacting Customer Support, please provide the following:

- Product version and program/module name

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

Review Patch Documentation

When you install the application for the first time, you install either a base release (for example, 14.1) or a later patch release (for example, 14.1.2). If you are installing the base release or additional patches, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch releases can contain critical information related to the base release, as well as information about code changes since the base release.

Improved Process for Oracle Retail Documentation Corrections

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This process will prevent delays in making critical corrections available to customers. For the customer, it means that before you begin installation, you must verify that you have the most recent version of the Oracle Retail documentation set. Oracle Retail documentation is available on the Oracle Technology Network at the following URL:

<http://www.oracle.com/technetwork/documentation/oracle-retail-100266.html>

An updated version of the applicable Oracle Retail document is indicated by Oracle part number, as well as print date (month and year). An updated version uses the same part number, with a higher-numbered suffix. For example, part number E123456-02 is an updated version of a document with part number E123456-01.

If a more recent version of a document is available, that version supersedes all previous versions.

Oracle Retail Documentation on the Oracle Technology Network

Oracle Retail product documentation is available on the following Web site:

<http://www.oracle.com/technology/documentation/oracle-retail-100266.html>

(Data Model documents are not available through Oracle Technology Network. You can obtain them through My Oracle Support.)

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.

Convention	Meaning
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Getting Started

The Macro Space Planning suite comprises two applications: Macro Space Management (MSM) and In-Store Space Collaboration (ISSC). ISSC has an extension called ISSC Mobile. This allows a store assistant to see changes in the store they are working in using a mobile device.

These are continuously being improved and developed. The hardware configuration and requirements required to run the system may change from time to time. Although this document includes the latest configuration and requirements, refer to the *Oracle Retail Macro Space Planning Release Notes* and *Oracle Retail In-Store Space Collaboration Release Notes* to confirm the current requirements for the version being installed.

The current base release of the software can be obtained from the Oracle software Delivery Cloud website: <http://edelivery.oracle.com>. Users should also check for any subsequent patches. These are available from the My Oracle Support website: <https://support.oracle.com>. That ensures the user is installing the latest modifications and bug fixes.

This chapter provides an overview of the typical installation configuration of the Oracle Retail Macro Space Management and In-Store Space Collaboration applications. It is intended to assist in planning the most efficient implementation of the applications. It includes the following sections:

- [Interrelationship between Macro Space Management and In-Store Space Collaboration](#)
- [Overview of Typical Infrastructures](#)
- [Software Architecture](#)
- [Steps for Installing Macro Space Management](#)
- [Steps for Installing Macro Space Management and In-Store Space Collaboration](#)
- [Reports](#)

Interrelationship between Macro Space Management and In-Store Space Collaboration

The Macro Space Planning (MSP) family consists of two products:

- Macro Space Management
- In-Store Space Collaboration

MSM is the 'core' application and must be installed. ISSC is optional and may or may not be installed depending on the user's preference. If ISSC is installed it contains an

application extension called ISSC Mobile. If deployed, this enables users with mobile devices to identify changes to equipment and planograms in the store they work in.

This Installation Guide contains instructions on how to install either MSM, or both MSM and ISSC. Where there are differences between the two types of installation, alternative instructions have been provided.

Overview of Typical Infrastructures

A typical infrastructure may contain several server configurations and multiple user workstation environments.

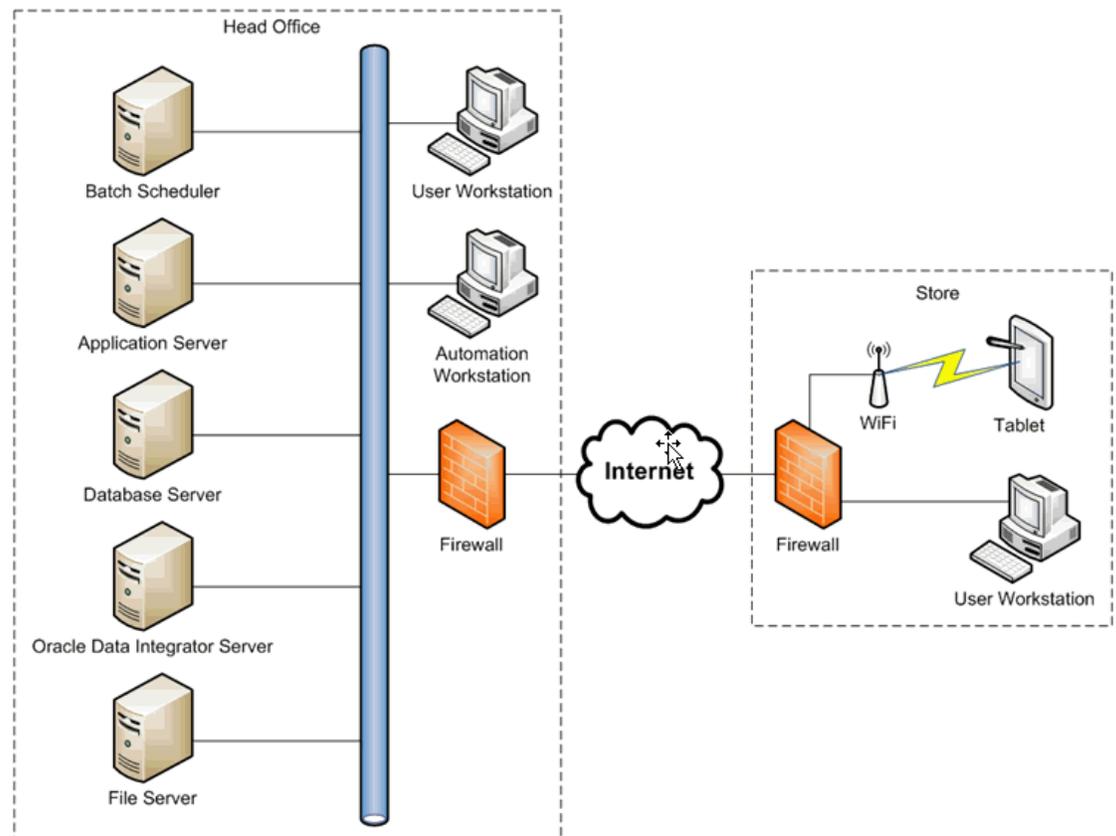
Installing Macro Space Management and In-Store Space Collaboration

Note: Note that the server machines shown may be separate devices, separate virtual machines or a single machine depending on the hardware configuration and sizing selected by the retailer. The factors that determine which choice is made by the retailer are outside the scope of this document.

The environment for when both MSM and ISSC are installed contains several server configurations and the multiple user workstation environments needed to support both internal (LAN) and external (internet enabled) clients for MSM and ISSC.

Similar to the traditional client-server environments, you must define the following environments:

- Database Server
- Application Server
- File Server
- Batch Scheduler
- Automation Workstation
- User Workstation
- ISSC Mobile

Figure 1–1 Typical Infrastructure with MSM and ISSC Installed

About the Server Infrastructure

It is not required for each server identified in the above diagrams to be a dedicated independent server machine. Depending on the perceived load that each server is likely to be given, the servers can either share a machine with another MSM/ISSC server or be located on an existing machine within the existing IT infrastructure.

About Macro Space Management Users (except Planner Users)

MSM users must be on a Local Area Network (LAN). They connect to the database and file servers through this internal network. This connection is both at the file system level as well as through an ActiveX Data Object (ADO) connections to the database.

Access to Macro Space Management is controlled via MSM's own security system.

About In-Store Space Collaboration and Planner Users

ISSC and Planner Users may connect to the central application database either via a LAN or remotely via the internet. The client application installed on the workstation is configured to connect to the server application installed on a server; the server application controls security and all of the connections to the database.

The ISSC and Planner workstations are thin client applications and run on a Microsoft Windows operating system. The application is configured during installation to locate a server and port. When this has been done, the user can log into the system using their own security system.

Note: The ISSC and Planner applications connect to a specific IP address through a configurable port. This allows for the opening of a specific port through a company's firewall to allow remote access to the application server application.

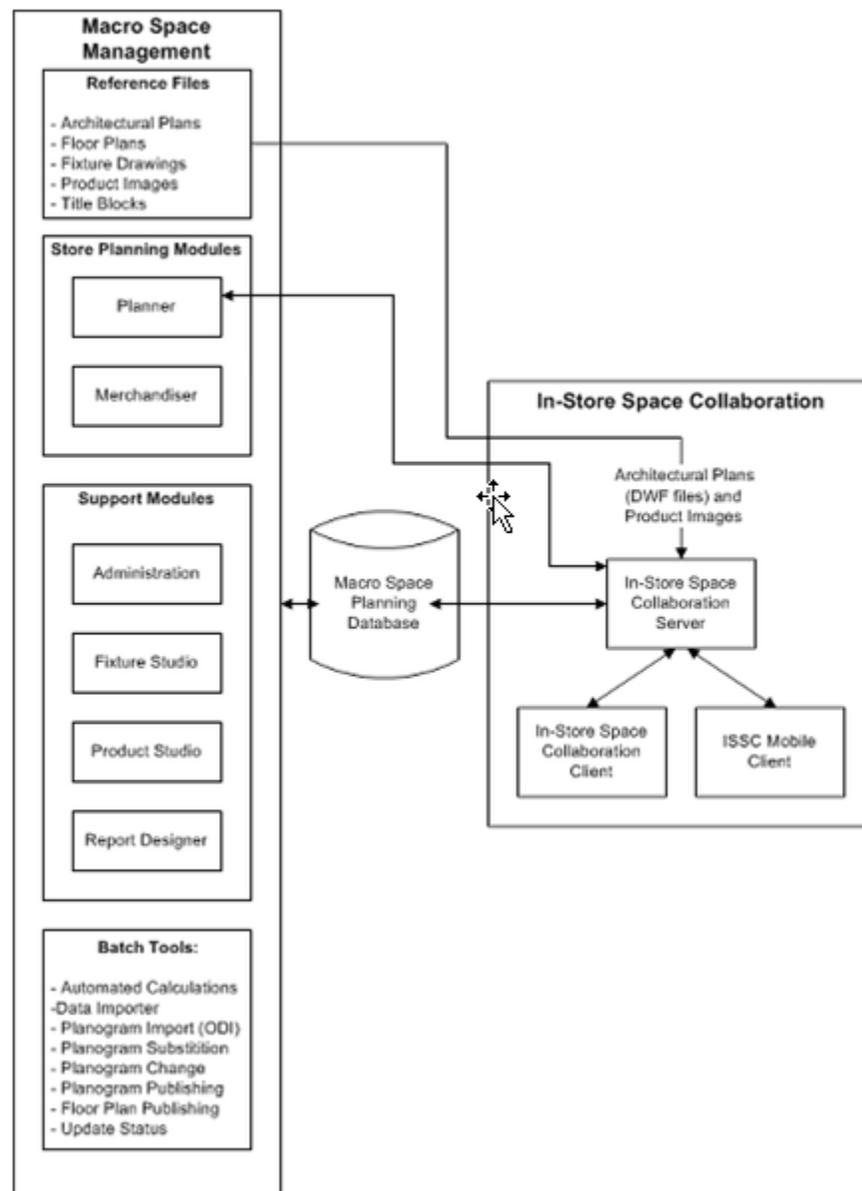
The ISSC and MSM applications share the same database. This allows ISSC users to open, edit and save store plans, with the modified data subsequently available to MSM users.

Software Architecture

The following diagram illustrates the major components of the MSP application suite.

Note: MSM is mandatory. ISSC is optional.

Figure 1-2 Software Architecture



Reference Files

The reference files are held on the File Server and provide a central repository for non-database information required by the MSM and ISSC applications. Administration of the reference files is done via the MSM application.

The reference files include:

- Architectural Plans in the form of DWG and DWF files
- Floor Plans in the form of DWG files
- Fixture drawings in the form of DWG, 3DS and LWO files
- Product Images
- Title Blocks

The majority of this information is used in the MSM application. The ISSC application server has an interface which allows it to use DWF files and product images.

Macro Space Management Store Planning Modules

The Planner and Merchandiser modules provide alternative ways to add, edit, delete and manage store plans. (The Planner Module provides an AutoCAD based environment; the Merchandiser Module provides a virtual reality environment.)

The Planner and Merchandiser modules read and write data to and from the central database. They also read from and write to the reference files.

Macro Space Management Support Modules

The MSM Modules allow the creation and maintenance of information used in the generation and revision of store plans. These tools include:

- Administration Module — used to configure the global operation of the software
- Fixture Studio — used to maintain the fixtures, fittings and shelves placed in store plans
- Product Studio — used to maintain the product hierarchy

Note: The Merchandiser module has a facility for creating and editing Planograms.

The support modules read from and write data to the central database. Fixture Studio and Product Studio also read and write to and from the reference files.

Macro Space Management Batch Tools

The MSM Batch tools are installed on the Batch Service server. The specific tools required for batch operations can then be run automatically at specified times.

These batch tools are for the bulk processing of data and are usually run during periods of low demand on the MSM system, such as overnight. Batch operations include:

- Import of data from third party databases via the Data Importer module
- Import of planogram information via Oracle Data Integrator (ODI)
- Carrying out planogram substitution and revision change
- Automated publishing of planograms
- Updating the statuses of stores and floor plans

Use of the Batch tools will result in changes being made to the central database and to the reference files.

Note: AutoCAD places restrictions on the windows platforms on which it can be installed. See the Autodesk website for more information.

Macro Space Planning Server Application

The MSP server application is normally installed on the MSP server machine. It authenticates MSP users when they log-in directly with the MSM database.

The server application allows the use of specific types of reference files within MSP. These are:

- DWF files for Architectural Plans
- Product images for Schematic Previews of Planograms

The server application also allows data to be passed to and from the database when the MSP client applications open, edit and save store plans.

Macro Space Planning Server Log Information

Log information generated by the MSP server is stored in the MSP database. If the database is not available messages will be stored in the Windows Event Viewer.

In-Store Space Collaboration Client Application

The ISSC Client application is installed on the user's computer. It connects to the central database via the ISSC server and allows users to read and update information in the database.

The ISSC application may either be installed on a LAN or may be remote, connecting via the Internet.

ISSC also has an extension called ISSC Mobile. This allows a user to use a sub-set of functionality allowing users to see changes in the store they work in.

Note: The ISSC Client application can be installed on a PC or Laptop depending on the user's preference. If using remote access, it is possible to use a WiFi connection, enabling the user to (for example) walk round a store while using the software.

In-Store Space Collaboration Mobile (ISSC Mobile) Application

This application is an extension of ISSC. It is installed on a mobile device and can be configured to show fixture and planogram changes in once specific store. It is generally used by store associates.

Steps for Installing Macro Space Management

This guide explains how you install and set up the MSM, along with the required software.

The instructions in this guide assume knowledge of application servers, databases, and application installation, and are intended for system administrators and experienced IT personnel. Before carrying out any of these activities, ensure that you understand Windows administrative functions, SQL commands, and directory operations.

In order to implement MSM for production, you must perform the following tasks in a sequence:

Step	Description
Pre-installation Steps	
1.	Plan your environment, based on your business needs. For more information on the planning process and the supported configurations, see Planning Your Installation .
2.	Install and set up your application database. For more information, see Setting Up the Database .
3.	MSM requires an installation of Autodesk AutoCAD. Install and set up your AutoCAD license. For more information, see Setting Up AutoCAD .
Installation Steps	
4.	Access the MSM installation software, set up your installation, and run the installer. For more information, see Installing Macro Space Management .

Steps for Installing Macro Space Management and In-Store Space Collaboration

This guide explains how you install and set up MSM, ISSC and ISSC Mobile, along with the required software.

The instructions in this guide assume knowledge of application servers, databases, and application installation, and are intended for system administrators and experienced IT personnel. Before carrying out any of these activities, ensure that you understand Windows administrative functions, SQL commands, and directory operations.

In order to implement MSM, ISSC and ISSC Mobile for production, you must perform the following tasks in a sequence:

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2.	Install and set up your application database. For more information, see Setting Up the Database .
3.	MSM requires an installation of Autodesk AutoCAD. Install and set up your AutoCAD license. For more information, see Setting Up AutoCAD .
Installation Steps	
4.	Access the MSM installation software, set up your installation, and run the installer. For more information, see Installing Macro Space Management .
5.	Access the MSP server installation software and run the installer. For more information, see Installing the MSP Server .
6.	Access the ISSC client installation software and run the installer. For more information, see Installing the ISSC Client .
7.	Install the ISSC Online Help. For more information, see Installing the ISSC Help .
8.	Deploy ISSC Mobile where required. See Installing ISSC Mobile .

Reports

Reporting within the MSM and ISSC applications is provided in several ways:

- Quick Reports, which generally show information pertinent to the currently open floor plan
- KPI Reports, which use Hot-spotting to color objects within the floor plan
- BI Publisher Reports which are able to display any information within the MSM database.

A set of standard reports are provided for each Quick Reports and KPI Reports. Users are not limited to these reports and can develop their own.

In addition ISSC Mobile has two pre-configured KPIs to show changes in fixtures and planograms compared to the last version of the floor plan.

Note: Additional Quick Reports can be configured within the AVTTB_Custom_SQL table. Additional KPI's can be configured by creating new SQL statements or additional Stored Procedures in the database. (See the *Data Model* and *Administration Module User Guide* for more information.)

The BI Publisher application must be installed before the user can make or configure BI Publisher reports.

Note: The license for MSM and ISSC does not include a license to run BI Publisher.

Detailed information on the use of BI Publisher is outside the scope of this document. Please see the BI Publisher documentation at <http://www.oracle.com/technetwork/middleware/bi-publisher/overview/index.html>

Windows Display Settings

The Windows Control Panel, Display Settings option provides a number of settings that affect the size of what is shown on the computer monitor. This allows the user to change the display resolution to 125% or 150% from the default of 100% to assist viewing. This is not recommended as it may affect the display of dialog boxes and other controls in MSM and ISSC.

The recommended option is the Magnifier - available from the same page. This allows the size of a portion of the screen to be increased and more easily read if required.

Planning Your Installation

Before installing the Oracle Retail applications, you must first determine the performance and availability goals for your business, and then plan the hardware, network, and storage requirements accordingly. These requirements will vary from client to client and the information in this chapter should be used for guidance purposes only and not regarded as specific recommendations for a given installation.

This chapter provides suggestions on some basic considerations for the implementation. It also includes the list of hardware and software requirements.

This section contains the following topics:

- [Implementation Capacity Planning](#)
- [Planning Your Environment](#)
- [Planning for Optimal Macro Space Planning Performance](#)
- [Supported Configurations and Requirements](#)

Note: The planning process must take into account whether MSM alone is to be installed, or whether both MSM and ISSC are to be installed

Implementation Capacity Planning

There is significant complexity involved in the deployment of Oracle Retail applications, and capacity planning is site specific. Oracle Retail strongly suggests that before installation or implementation you engage your integrator (such as the Oracle Retail Consulting team) and hardware vendor to request a disk sizing and capacity planning effort.

Sizing estimates are based on a number of factors, including the following:

- Workload and peak concurrent users and batch transactions
- Hardware configuration and parameters
- Data volume
- Application features utilized
- Length of time history is to be retained

Additional considerations during this process include your high availability needs as well as your backup and recovery methods.

Planning Your Environment

After establishing the required capacities, plan and prepare the production environment, based on your business needs, for the installation. This includes:

- Meeting the hardware and associated software requirements.
- Acquiring the prerequisite software (and licensing).
- Setting up the load balancers and clusters (if required).
- Planning the data security policies.
- Designing the backup and recovery strategies.

Planning for Optimal Macro Space Planning Performance

Consider the following steps to plan and prepare the production environment.

- Determine the business processes required to efficiently run your retail chain. Establish how these can be implemented in MSP to assist in improving the profitability of the retail outlets.
- Determine the metrics required to monitor the performance of the retail chain. Establish how these metrics can be measured and reported.
- Determine where and when the batch processes will operate.
- Determine where and when any data import processes will operate.
- Determine how information (such as floor plans, planogram designs and reports) will be disseminated to store and senior management.

Careful planning of how to best install and use Macro Space Planning will enable users to get the best out of the application.

Supported Configurations and Requirements

This section describes the hardware and network requirements for the MSM and ISSC applications, and includes the following topics:

- AutoCAD Requirements
- Server Requirements
- Macro Space Management User System Requirements
- In-Store Space Collaboration User System Requirements

AutoCAD Requirements

Macro Space Management supports AutoCAD 2016.

Note: See the AutoCAD website for the latest AutoCAD installation information and patches.:

Server Requirements

The specific server requirements will depend on the results of the Implementation Capacity Planning. For a small implementation, all requirements could be met using a single server. For larger systems, a number of dedicated servers could be used, including Database, ISSC, File and Batch Servers.

Oracle Retail strongly suggests that before installation or implementation you engage your integrator (such as the Oracle Retail Consulting team) and hardware vendor to request a disk sizing and capacity planning effort.

The two most critical requirements are for the database and In-Store Space Collaboration servers. Minimum requirements are given below:

Database Server

The Database Server Requirements are as follows:

Table 2–1 Database Server Requirements

	Requirement
Software Requirement	Oracle Database 12c (12.1) Enterprise Edition

ISSC Application Server

The ISSC Application Server requirements are as follows:

Table 2–2 ISSC Application Server Requirements

	Requirement
Operating System Requirement	Windows 7 Service Pack 1 (64 bit) Windows 10 (64 bit) Windows Server 2012 R2 (64-bit)
Software Requirement	Oracle Database Client 12cRelease 2 (12.1) 64 bit Oracle Data Provider for .NET 12.1 Microsoft .Net Framework 4

Batch Server

The requirements for the batch server are as follows:

Table 2–3 Macro Space Management User System Requirement

	Requirement
Hardware	Intel® Pentium® 4 or AMD Athlon® dual-core processor, 1.6 GHz or higher with SSE2 technology Minimum 2GB RAM
Operating System Requirement	Windows 7 Service Pack 1 64 bit Windows 10 64 bit Windows Server 2012 R2 64 bit
General Software requirements	Microsoft .NET Framework 4
Database software Requirements (requires one of)	Oracle Database 12c (11.2.1). Oracle Data Provider for .NET 12.1 or higher.
Free Space disk Requirements	A minimum of 1 GB is recommended.

Note: Batch processes involving floor plan publishing and floor plan processing can only be carried out on a machine with a full MSM installation.

File Server

The files on the file server must be accessible to the LAN Client Workstation and MSP Server machine.

LAN Client Workstation Requirements

These requirements are for a LAN client workstation running the MSM application. For LAN client workstations running only the In-Space Store Collaboration application, the minimum requirements should match those for Remote Users in the section below.

Table 2–4 Macro Space Management User System Requirement

	Requirement
Hardware (These requirements are primarily concerned by the need to operate AutoCAD.)	Intel® Pentium® 4 or AMD Athlon® dual-core processor, 1.6 GHz or higher with SSE2 technology Minimum 2GB RAM 1024 x 768 display resolution with true color 256 Graphics Accelerator card for MSM Merchandiser users
Operating System Requirement	Windows 7 Service Pack 1 64 bit Windows 10 64 bit
General Software requirements	AutoCAD 2016 with AutoCAD 2016 SP1 Microsoft .NET Framework 4 ODI Studio 12.2.1 (Required for importing Planograms from third party sources)
Database software Requirements	Oracle Database 12c Client (12.1) 32 bit and 64 bit versions required. Oracle Data Provider for .NET 12.1 or higher.
Free Space disk Requirements	A minimum of 1 GB is recommended.

Note: When installing MSM on a Windows installation, users will require Administrators privileges to install the application and to configure it after installation.

In-Store Space Collaboration User System Requirements

These are the requirements for a user just running the In-Store Space Collaboration application. These are significantly less than those for the Macro Space Management application.

Table 2–5 In-Store Space Collaboration Requirements

	Requirement
Hardware	Minimum 1.0 GHz processor clock speed Minimum 1 GB RAM 1024 x 768 VGA video display with 256 colors
Operating System Requirements	Windows 7 (32 or 64-bit).
Software Requirements	Microsoft .Net Framework 4
Free Disk Space	A total of 20 MB free disk space is required. However, there should be sufficient disk space for windows to operate in addition to this 20 MB.

In-Store Space Collaboration Mobile (ISSC Mobile) User System Requirements

These are the requirements for a user using the ISSC Mobile extension for ISSC.

Table 2–6 ISSC Mobile Requirements

	Requirement
Hardware	Apple tablet device
Operating System Requirements	iOS.6 or above

The following MSP applications are installed on the following types of machines:

Table 2–7 Macro Space Planning Software Types

Macro Space Planning Software	Software Type	Physical Machine
Application Server Service	Server	Application Server
MSM Clients (Win 7) Planner Merchandiser Administration Fixture Studio Product Studio Report Designer	Client	User workstation (Head Office)
MSM Clients (Win 10) Planner Report Designer	Client	User workstation (Head Office)
Batch Runner (Win 7 and Win 10) Update Status Planogram Publishing Planogram Substitution	Client	Batch Scheduler
Automated Calculations (WIN 7)	Client	Batch Scheduler

Table 2–7 (Cont.) Macro Space Planning Software Types

Macro Space Planning Software	Software Type	Physical Machine
Planner Automation (Win 7 and Win 10) Floor Plan Publishing Floor Plan Processing	Client	Automaton workstation
ISSC Desktop (Win 7 and Win 10)	Client	User workstation (Head Office/Store)
ISSC Mobile	Client	Tablet
Planogram Import (Win 7 and Win 10)	Data Integration	Data Integration Server

Note: Installation of pre-requisite software such as Oracle Database (Client & Server) and Oracle Data Integrator is outside the scope of this document.

Setting Up the Database

This chapter describes how you can set up your database, and the various database components. It contains the following sections:

Note: The steps to set up the database are identical irrespective of whether just MSM or both MSM and ISSC and its extension ISSC Mobile are to be installed.

- Installing the Database Software
- Creating an Application Database
- Creating the Database Master User Account
- Installing the Template Database
- Using the Upgrade Scripts

User Names and Passwords

When installing the Macro Space Planning application (Macro Space Management and In-Store Space Collaboration) it should be borne in mind that there are three types of user name and password required.

- The Master User Name and Password required to set up the Oracle database.
- A User Name and Password with the appropriate roles any synonyms assigned that will allow an MSP users to access the database objects that will be required for their tasks in the MSP application.
- The User Name and Password required to access the Macro Space Planning application.

The user name and password required for this section is the User Name and Password for the Oracle database.

Installing the Database Software

The application requires the installation of the following Oracle database version:

- Oracle® 12c Database (12.1)

Ensure that the Oracle Database software is installed along with the Natively Compiled Java Libraries. For more information, see the *Oracle Database Installation Guide, 12c (12.1)* and *Oracle Database Companion CD Installation Guide, 12c (12.1)*

Creating an Application Database

You can create a database when installing the database software, using a Database Configuration Assistant, or using your own scripts. To ensure optimal performance, Oracle recommends that you plan the logical storage structure, database design, and the backup strategy before creating the database. For more information, see the *Oracle Database Administrators Guide* for the version of the Oracle database installed.

Note: If using an Oracle database then the MSM client machines and the ISSC server must have Oracle Client and the pertinent Oracle Data Provider (ODP) installed. MSM and ISSC server require the run time environment with the ODBC drivers. This can be installed by selecting the Administrator option when prompted to 'Select installation type' during the installation of Oracle Client.

Creating the Database Master User Account

Once you have the database installed, you must create a database master user account that will be used during the installation to configure the application database. This master user account may also be used to enable users to connect to the database, but a more secure way is to create a series of users using roles and synonyms. This method gives a far more restricted access to the database objects and restricts the attack vector for a malicious user.

You may choose to create default data user account using the Oracle Enterprise Manager Database Control. This section describes how you create the user account using the Oracle Enterprise Manager Database Control.

To create the user account:

1. On a Web browser, enter the Database Control URL in the Address field, and press Enter. The URL will be similar to the following address:
http://<host-name>:<dbportnumber>/em Where,
 - <host-name> — is the host name of the system where the database is installed.
 - <dbportnumber> — is the database control port number.
2. On the **Database Login** page, log on to the database instance using the system user name and password.
3. Once logged in, click the **Administration** tab.
4. On the **Administration** tab, under the **Schema** area, click **Users** in the **Users & Privileges** section.
5. On the **Users** page, click **Create**. This button appears on the right corner of the screen.
6. On the **Create User** page, under the **General** tab, type the user name and password for the default data user. Retain the default options set in **Profile** and **Authentication** drop-down lists.

Note: If tablespaces have not been set or planned, you may choose to leave the Default Tablespace and Temporary Tablespace fields blank.

7. Click the **Roles** tab.

8. On the **Roles** tab, click **Edit List** (appears on the right), and ensure that the **CONNECT**, **RESOURCE** and **DBA** roles are selected.
9. On the **Create User** page, click **OK**. The user account is created.

Installing the Template Database

If the application is being installed for the first time, the Template Database should be installed. This contains sufficient information for the software to function. Two template databases are supplied: metric and imperial. The Metric and Imperial versions of the Template Database have different values for objects such as system variables, tolerances and block parameters.

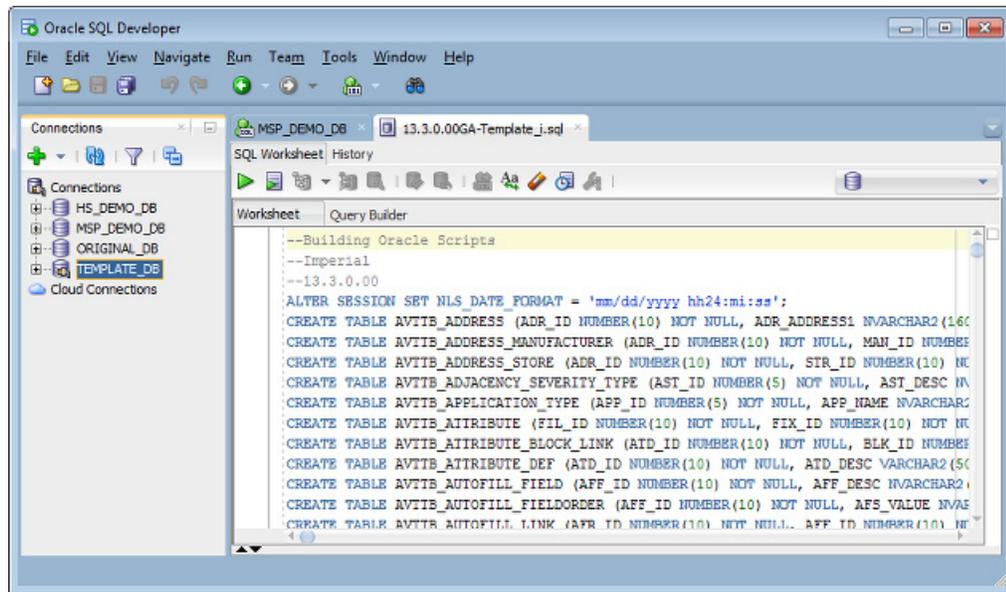
The person tasked with installing the Template Database must select the version appropriate to the installation.

The Template Database is supplied in the form of a SQL script. This can be run against the application database previously created by the user. The database will then contain the tables required by the application.

Note: The installed tables contain a partial set of data. Additional data will have to be imported or input during the Implementation stage before the application contains the full set of data necessary for store planning.

To install the Template Database:

1. Determine the correct Template Database to install.
2. Open a suitable database management tool such as Oracle SQL Developer.
3. Connect to the required database.
4. Copy the required Template Database script into SQL Developer.
5. Run the script.
6. Confirm from the results that the script has executed without error.

Figure 3–1 Using Oracle SQL Developer to install the Template Database

Using the Upgrade Scripts

If the application is being installed as an upgrade to a previous installation, it may be necessary to run upgrade scripts to modify the database so it is suitable for the upgraded application.

Note: Before running the upgrade scripts, it is good practice to backup the existing database.

A set of upgrade scripts are supplied. The build number of the application to be removed for upgrading should be noted and compared with the build number of the application to be installed. The necessary upgrade scripts can then be selected.

- Generic upgrade scripts modify general information in the database and should not affect the subsequent functioning of the application. They can be used on both imperial and metric databases.

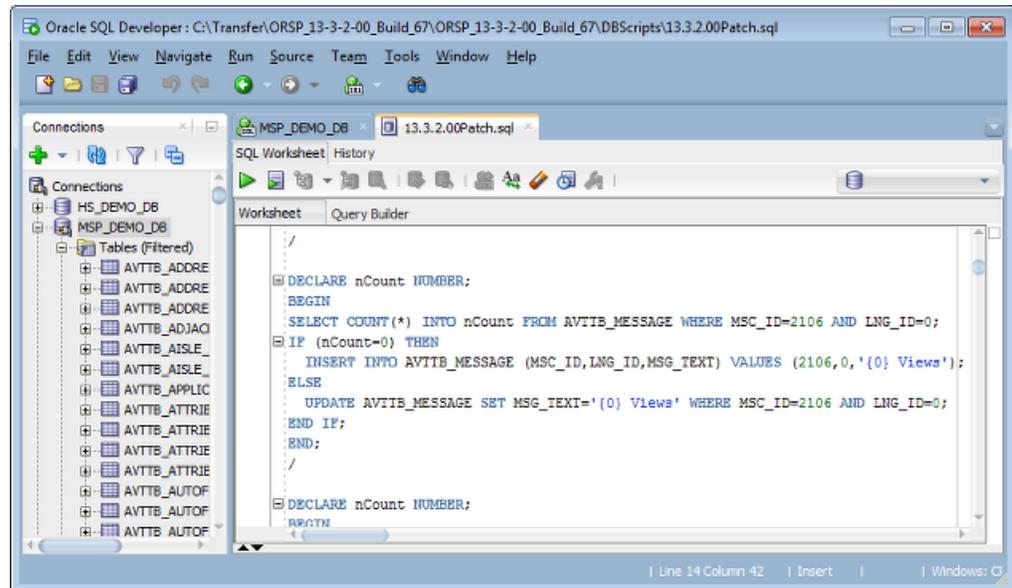
Note: If necessary contact Oracle Technical Support for assistance.

To use the upgrade scripts:

1. Determine if the database is imperial or metric.
2. Determine the build number of the software/database currently in use.
3. Determine the build number of the software to be upgraded to.
4. Determine which upgrade scripts are required and the sequence they are required in.
5. If any of the upgrade scripts are 'custom' upgrade scripts, determine the impact on the database and decide on any associated actions.
6. Open a suitable database management tool such as Oracle SQL Developer.

7. Connect to the required database.
8. Copy the first required upgrade script into SQL Developer.
9. Run the script.
10. Confirm from the results that the script has executed without error.
11. Continue to run the upgrade scripts in sequence until all the required scripts have been executed.

Figure 3–2 Using Oracle SQL Developer to run Upgrade Scripts



12. Run the script in the 14.1.2.00ApplicationRoles.sql to set the necessary application roles permissions.

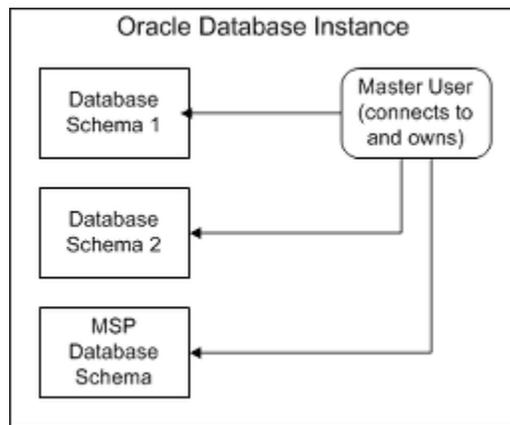
General Principles of Roles and Synonyms

Database administrators can configure their database instance in such a way as to minimise the attack surface for malicious users. There are a number of ways to configure the security. This section of help describes two of them; using a master user and also creating users for MSP that make use of roles and synonyms. The latter choice is significantly more secure.

Master User

The most basic way of configuring the database is to create a master user. However, if this master user has been assigned the DBA role, they can access and modify other database schemas.

Figure 3–3 Example of Master User

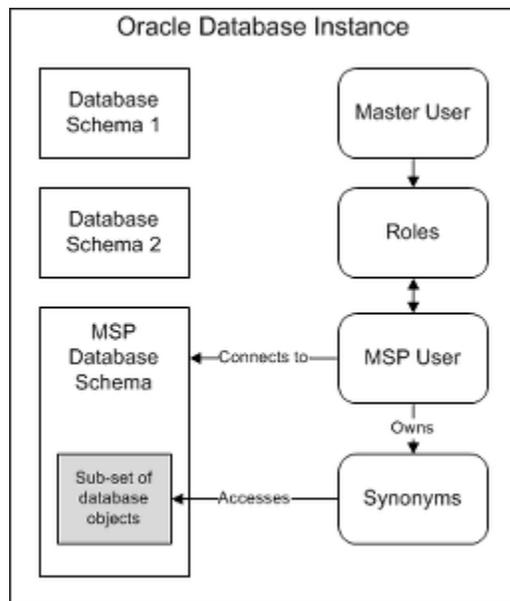


In the above example a master user was set up to own the Macro Space Planning database. However, because the master user was assigned the DBA role, they also can access Database Schema 1 and Database Schema 2. This may lead to security vulnerabilities.

Working with Roles and Synonyms

A way of providing a more secure way for MSP users to access the database is by means of roles and synonyms. The process is described in the flowchart below.

Figure 3–4 Example with Roles and Synonyms



1. The Master User creates the MSP database schema using the template script.
2. The Master User creates the MSP Roles using the SQL script provided. There are nine default roles provided:
 - Administrator

- Automation
- ISSC Server Service
- Help Desk Agent
- Merchandising Manager
- Merchandising Planner
- Product Data Steward
- Stope Planning Manager
- Store Planner

One or more of these roles need to be added.

Note: These roles are additional to the Oracle supplied roles that are defaults within an Oracle database instance.

3. The Master User creates an MSP User that will have specific rights to the MSP database schema. This will allow the MSP user to connect to the database when roles are assigned in the next stage. Until synonyms are assigned this user will not be able to access any database objects.
4. The Master User creates the required synonyms using the script provided for the specified role. When the appropriate synonyms are assigned to it, the MSP user will be able to access the database objects in the MSP database pertinent to that role. They will have no rights to any objects on any other database schemas.

Note: If multiple databases are in use - for example a production database and a test database - and one person is required to have access to both database instances, separate users must be set up so that the synonyms associated with a specific user can only access the tables in one database.

Setting up a User with Roles and Synonyms

This section describes the practicalities of setting up roles and synonyms for the Macro Space Planning database.

Master User

The master user must have sufficient database privileges to create the database instance and then create the required MSP users, roles and synonyms. The master user should have the following Oracle specified roles:

- Connect
- Resource
- DBA

Application Requirements

Application requirements are described below. They vary because MSM is a thick client and ISSC a thin client.

Macro Space Management

Each person logging into MSM requires their own database user. Each individual database user must then be assigned the pertinent role and synonyms.

Note: It is important that the privileges assigned in the Functional Security dialog box of the Administration module in MSM match the role assigned to the user. If the user is given the Merchandise Manager role in the database, but administrators privileges in the Administration module, many of the MSM tasks will fail because the user will not have access to the pertinent database objects.

In-Store Space Collaboration

Only one ISSC database user need be created. This is given the ISSC server role and the synonyms required to access the tables referenced by ISSC.

Creating an MSP User

Creating an MSP user requires the following steps:

Creating the Roles

The first stage is for the master user to create additional MSP specific roles to supplement the default Oracle roles supplied with the database. The roles give the users they are assigned to the rights to carry out select, insert, update or delete privileges on a sub-set of tables. It also allows that user rights to execute specified stored procedures, call designated functions and reference other database objects.

Note: The user assigned one of these roles will not be able to access these database objects until the synonyms are assigned as well.

Creating the roles is done by running the 14.1.2.00DatabaseRoles.sql script provided with the installation package. This provides a set of roles, each pertinent to a specific task in the application. These roles are:

- **MSP_APPADMINISTRATOR**

This role will be used to give varying degrees of access to all the objects in the database that the application uses. The rights to each object will depend on the needs of the application - the role might have select rights to one table and edit rights to another.

Access to the varying modules is configured in the MSM Administration module according to the retailer's requirements. This could purely be to access the Administration module or it could be to access all modules.

- **MSP_AUTOMATION**

This role will be used to give access to those database objects involved in the running of batch processes.

- **MSP_ISSCSERVER**

This role will be used to give access to the database objects pertinent to the operation of ISSC.

- **MSP_ITHelpDeskAgent**

This role has identical privileges as the MSP_APPADMINISTRATOR role. It has been provided so that the purpose of the user can be identified from the role assigned to it.

This means administrators and support staff can be differentiated from each other.

■ **MSP_MERCHANDISINGMANAGER**

This role is intended for managers using the a range of modules for the full range of store planning activities. They have access to the database objects associated with:

- Data Importer
- Merchandiser
- Planner
- Planogram Substitution
- Product Studio
- Report Designer
- Report Studio (legacy functionality)
- Store Comparison

■ **MSP_MERCHANDISINGPLANNER**

This role is intended for store planners using the Planner and Merchandiser modules for store planning. They have a slightly more restricted access than the MSP_MERCHANDISINGMANAGER role. They have access to the database objects associated with:

- Merchandiser
- Planner
- Planogram Substitution
- Product Studio
- Report Studio (legacy functionality)
- Store Comparison

■ **MPS_PRODUCTDATASTEWARD**

This role is used to give access to the database objects concerned with maintaining the product hierarchy via Product Studio.

■ **MSP_STOREPLANNER**

This role is intended to give access to most actions associated with carrying out store planning. They have access to the database objects associated with:

- Merchandiser
- Planner
- Report Studio (legacy functionality)
- Store Comparison

■ **MSP_STORE_PLANNING_MANAGER**

This role is intended to give full access to carrying out store planning. They have access to the database objects associated with:

- Fixture Studio
- Merchandiser
- Planner
- Report Designer
- Report Studio (legacy functionality)
- Store Comparison

Creating the MSP User

The next stage is for the Master User to create the MSP user. The MSP User should be assigned the following roles:

- Connect.
- Create Session.
- A minimum of one of the MSP roles.

One user must be created for each person using an MSM database instance. If one person is to access two or more different database instances, they must be given a different user to connect to each database.

Only a single user need be created for ISSC as this is accessed via a thin client and the ISSC server service.

Assigning the Synonyms

When the MSP User was assigned one or more MSP roles, that gave user the right to select from or modify the specified database objects. However, as yet that MSP user has no rights to access those database objects. This is done by means of synonyms. These are private synonyms.

The Master User creates the required synonyms using the script provided for the specified role. One synonym script is provided for each role. Prior to running the script, the following data should be changed:

1. The **vOwner** variable should be changed to the name of the MSP User.
2. The **vTableOwner** variable should be set to the name of the Master User that created the object schema.

Figure 3-5 *Editing the Synonym Script*

```
BEGIN
  vOwner:='Example';
  vTableOwner:='Master User';
```

Synonyms and Multiple Databases

It is important that the same synonyms for a specific user do not apply to more than one database. For example, if a person has access to both a production and a test database, care has to be taken that different synonyms apply to the corresponding tables in the different databases.

This can only be done by creating two users and assigning them to the same application user. That user will have to use the Database Connection Tool (installed with MSM or ISSC) to change the connection and user when they want to switch from one database to another.

Setting Up AutoCAD

MSM requires the use of Autodesk AutoCAD for creating and maintaining store plans. Based on your business need, you may need to purchase a standalone or network AutoCAD license, install the application, and configure the relevant components.

This chapter introduces you to the AutoCAD installation process and provides any specific considerations required for MSM. It contains the following sections:

- [Installing AutoCAD](#)
- [Upgrading to Later Versions of AutoCAD](#)
- [Creating a Registry Entry](#)

Installing AutoCAD

Prior to installing AutoCAD, visit the Autodesk website for the latest information on installation, service packs and any other guidance.

Upgrading to Later Versions of AutoCAD

To upgrade to a later version of AutoCAD:

1. Uninstall Macro Space Management, patch first (if one exists) and then the base version. For more information, see [Removing Previous Versions of the Software](#).
2. Uninstall the old version of AutoCAD.
3. Install the new version of AutoCAD. Also ensure that the latest service packs have been downloaded.

Note: Macro Space Management must be removed prior to uninstalling the old version of AutoCAD. If this is not done there will be problems with subsequent Macro Space Management operations.

Creating a Registry Entry

After installing AutoCAD **and before installing MSM** it is essential to open and then close AutoCAD. This causes AutoCAD to write entries to the registry on the computer. These registry entries will be referenced by MSM during its installation process. If they are not present, the Planner Module will not work correctly after MSM has been installed.

Turn the hardware accelerator ON. To do this, run the AUTOCAD command GRAPHICSCONFIG and turn it on in the window.

Note: For this to work, the graphics card should be inserted and the drivers should be installed.

Removing Previous Versions of the Software

This chapter describes how to remove previous versions of MSM, MSP Server, ISSC Client and ISSC Help if you are upgrading to a newer version of the software. It contains the following sections:

- [Base Releases and Patches](#)
- [Backing Up Data Folders](#)
- [Removing Previous Versions of Macro Space Planning](#)

Base Releases and Patches

Macro Space Planning can be installed in two slightly different forms:

- The Base (or GA) Release
- Patch Releases

The Base Release is a full implementation of the software containing significant changes to functionality since the previous release. A Patch Release is installed on top of a Base Release. It contains some changes to the functionality and changes some of the code associated with the Base Release.

When updating to a new Base Release, it is necessary to remove all previous Base Releases and Patches. When installing a Patch Release (or installing an updated Patch Release) is generally sufficient to remove any existing Patch Releases.

Updating AutoCAD in parallel with Macro Space Management

If it is desired to update AutoCAD in parallel with Macro Space Planning, Macro Space Management should be removed prior to removing the current version of AutoCAD. Similarly, the new version of AutoCAD should be installed prior to installing the new version of Macro Space Management.

Failure to remove applications in the correct sequence may cause subsequent problems.

Note: See the section on [Setting Up AutoCAD](#) for more details on how to reinstall AutoCAD.

Backing Up Data Folders

Oracle strongly recommends that Installers take a backup copy of all data folders prior to removing parts of the application. This is particularly important where a copy of MSM is to be reinstalled on a server containing system data folders.

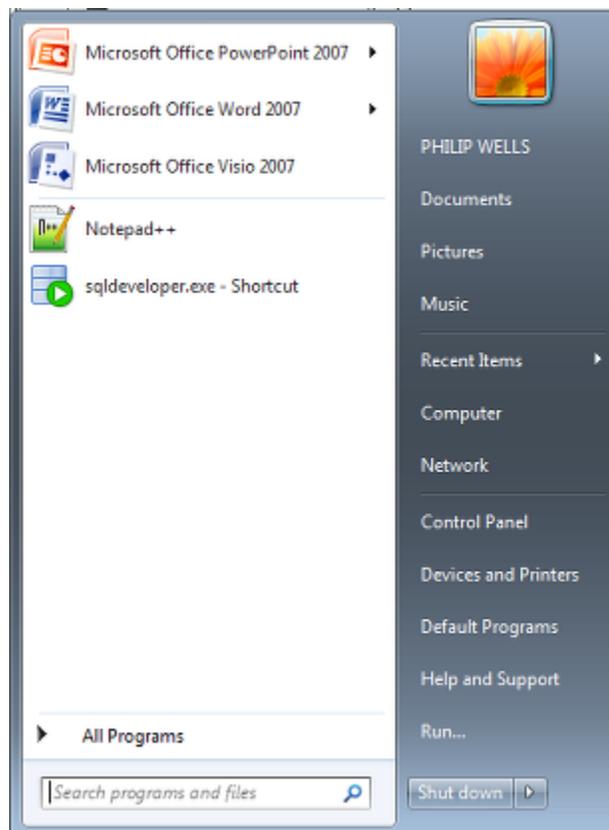
Removing Previous Versions of Macro Space Planning

Before removing previous versions, decide whether a Base Release, a Patch Release or both need to be removed. Remove the software accordingly.

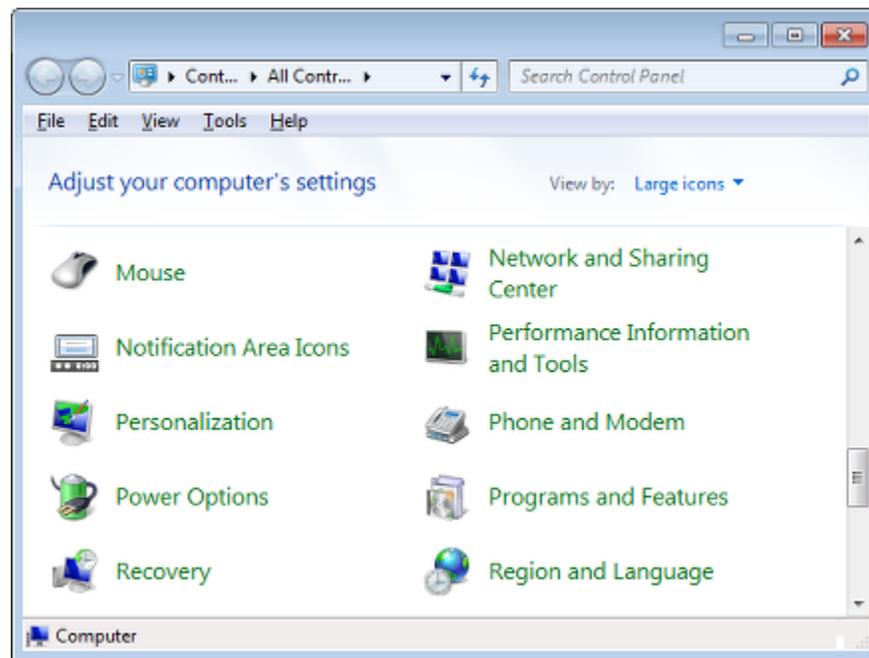
To remove a previous version of MSM or the ISSC Server, Client or Help:

1. From the Windows **Start** menu, navigate to the **Control Panel** option.

Figure 5–1 Start Menu - Control Panel



2. In the **Add or Remove Programs** window, ensure that **Change or Remove**.
3. In the **Control Panel**, double-click **Programs and Features**.

Figure 5–2 Control Panel - Add and Remove Programs

4. Select the previously installed version of the application in the list.
5. Click **Remove**. A confirmation message appears.
6. Click **Yes**.

Note: Failing to remove an older version of the application prior to installing the upgraded version may result in an error message requesting the older version be removed before continuing with the installation process.

Uninstalling ISSC Mobile

ISSC Mobile is uninstalled using the iOS operating system on the mobile device.

Problems with installing a later version of a Patch Release

On rare occasions there may be problems with installing (or reinstalling) a Patch Release on top of a Base Release. In this event remove both the Base Release and any Patch Release. Reinstall the Base Release, then reinstall the Patch Release.

Installing Macro Space Management

This chapter describes how you can install and configure the MSM application. It includes the following sections:

- [Before You Begin](#)
- [Installing and Updating the Macro Space Management Application](#)

Before You Begin

Before starting the installation, ensure that the database is correctly configured. It should either be the Template database for new installations, or upgraded (via upgrade scripts) for an existing installation.

For new installations, AutoCAD should have been opened and closed to create an entry in the registry.

Installation Options

When installing Macro Space Management, there are basic two installation options:

- Install Full Application
- Install Batch Tools

Users can select the required option during the installation process.

Customizable Buttons

Users can also opt to install customizable buttons. When configured, these give the user the option to run retailer specific stored procedures in the Planner module.

Full Application

The full application involves the installation of AutoCAD. It is intended for users using the Planner module and other functionality requiring the use of AutoCAD. If installing the full application, users will also have the option of installing the Customizable Buttons add on.

Batch Tools

There are certain repetitive tasks within MSM that take up considerable processing capacity. These can be run unattended as batch processes. These batch tools allow the installation of a sub-set of MSM components onto a server, allowing the majority of the batch operations to be executed there. Batch Tools does not require the installation of AutoCAD - this means Batch Tools cannot run any AutoCAD based functionality.

The installed Batch Tool components are:

- Administration Module
- Automated Calculations
- Batch Runner
- Planogram Substitution

Batch Runner allows the following additional batch process to be run on the batch server:

- Planogram Publishing

Note: Floor plan processing and floor plan publishing can only be run via Batch Runner on a machine with the full MSM installation.

System Requirements

The MSM database is hosted from a server machine and is accessed via a suite of client applications installed on the user's system. For more information on the client and server requirements, see [Supported Configurations and Requirements](#).

Previous Installation

If a previous version of MSM exists on the target machine, you must back up the data and uninstall the application before installing the current version. For more information, see [Removing Previous Versions of the Software](#).

An appropriate version of AutoCAD must be installed on the target machine before installation.

Note: The default installation location for the application has been changed. If upgrading from a previous installation, paths to any local directories will require modifying in the configuration module. See [Upgrading from Previous Installations](#).

User Access Privileges

Before installing the application, ensure that you have Windows Administrators privileges on the local machine.

User Names and Passwords

When installing the Macro Space Planning application (Macro Space Management and In-Store Space Collaboration) it should be borne in mind that there are two types of user name and password required.

- The User Name and Password required to access the Oracle database.
- The User Name and Password required to access the Macro Space Planning application.

Both sets of User Names and Passwords will be required for this section.

- The User Name and Password for the database may be required during the installation process to allow the installer to connect to the previously installed database.

- The User Name and Password for the Macro Space Planning application will be required to log into Macro Space Management to allow user access to be configured.

Installing and Updating the Macro Space Management Application

This part of the Installation Guide deals with installing the Macro Space Management Application itself. The next section of the Installation Guide deals with installing some optional Macro Space Management tools.

Locations to Install Macro Space Management

Client Work Stations

A full copy of MSM is usually installed on each client work station. This requires the prior installation of AutoCAD. Full installs allow the user to use all of the MSM functionality or to run AutoCAD based batch processes.

Batch Tools

Batch tools are generally installed on a server. The batch tools do not require AutoCAD and can be use to run all non-AutoCAD based batch processes. These batch operations can be carried out to a schedule and (if the server is fitted with a UPS) unaffected by power failures.

Installation of Macro Space Management Application

To install the MSM application:

1. If the application has been delivered in a compressed file format, for example WinZip, extract the installation files to a temporary folder that can be accessed by the installer.
2. Navigate to the location where the installation files are located and double click the **setup.exe** file. The installation wizard starts. When the preliminary operations have completed, the Welcome Screen will appear.
3. On the **Welcome** screen, click **Next**. The **Choose Destination Location** screen appears.

Select an installation location.

4. On the **Chose Destination Location** screen, click **Next**. The Setup type dialog will allow the user to pick from the following options:
 - Custom
 - Planner only
 - Typical (the default option)
 - A Custom setup type allows the user to select exactly what they would like to install from a detailed list (Note: this is the only setup type that allows sample data to be selected).
 - A Planner Only setup type installs only the Planner module
 - A Typical setup type installs all MSM client modules (but does not include sample data)

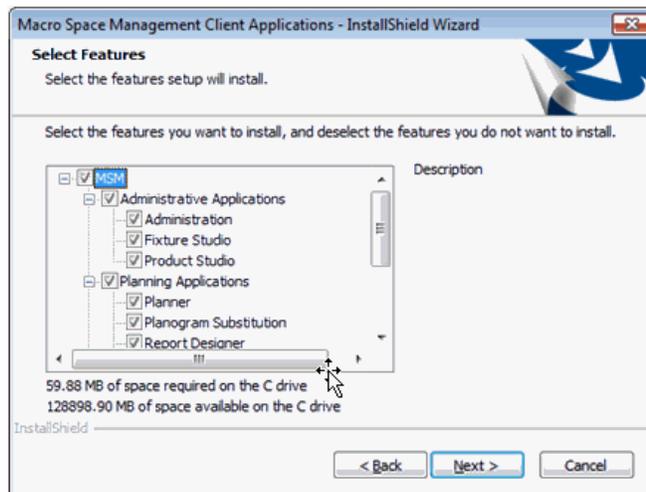
To install the complete application, select the Typical option.

Note: A Full MSM installation must be carried out on a computer or server where AutoCAD has previously been installed. See the AutoDesk website for information on what platforms AutoCAD can be installed on.

Batch tools does not require the presence of AutoCAD, but does require the presence of a suitable Windows operating system.

5. If you select Custom then the Select Features screen appears. For a WIN 7 user workstation, the setup features are as follows:

Figure 6–1 Select Features



The installation options hierarchy is as follows:

MSM

Administrative Applications

Administration

Fixture Studio

Product Studio

Planning Applications

Planner

Planogram substitution

Report designer

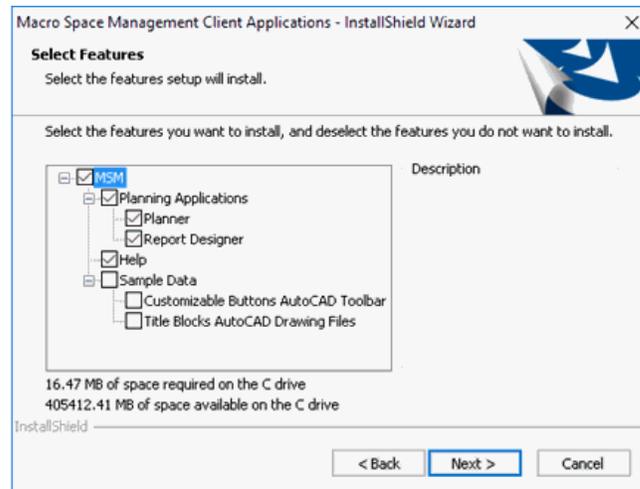
Merchandiser

Sample Data

Customizable buttons AutoCAD toolbar

Title blocks AutoCAD drawing files

For WIN 10 user workstation, the setup features are as follows

Figure 6–2 Select Features

The installation options hierarchy is as follows:

MSM

 Planning Applications

 Planner

 Report designer

 Sample Data

 Customizable buttons AutoCAD toolbar

 Title blocks AutoCAD drawing files

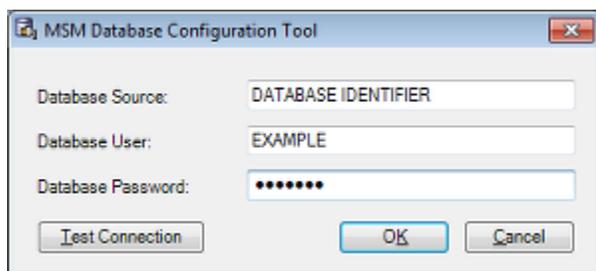
6. If any of the “Sample Data” options are chosen to be installed, a warning dialog will be displayed to warn you of the security considerations to be taken in to account when using the data.
7. It is possible to navigate to the Summary screen in the MSM Clients installation wizard either from the Setup Type screen or the Select Features screen, therefore pressing the Back button on the Summary screen returns you to the appropriate screen.
8. The Status screen displays a progress bar and provides (at a high level) the installation steps as they happen.
9. Finally the Complete screen confirms that the installation has either completed successfully or that the installation was cancelled.

Setting up the Connection to the Database

Once the application has been installed, the next stage is to set up the connection to the database. This connection must be set up with the Windows user who will use the connection logged on. If the connection is set up by another users, it will be invalid.

This is done using the **MSMDBConfigTool.exe** tool. This is found in the C:\Oracle Retail\MSM\Common.Net folder. Open the tool.

Figure 6–3 Database Configuration Tool

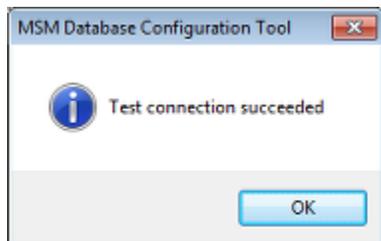


Enter the following Information:

- **Database Source**
This will be the name given to the database connection detail in the **tnsnames.ora** file.
- **Database User**
This is User Name for database access.
- **Database Password**
This is the Password for database access.

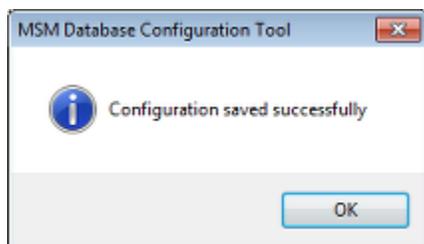
When this information has been entered, click **Test**. A dialog box will appear reporting on the result of the test. Click OK.

Figure 6–4 Connection Test Result



If the connection details have been correctly entered, click OK on the Database Configuration Tool. A dialog box will appear showing the connection has been save successfully.

Figure 6–5 Configuration Saved Successfully



Click OK and both this dialog box and the Database Configuration Tool will close.

Options for Setting up the Connection

Setting up the database connection requires a knowledge of the credentials to connect to the database. There are two options for doing this:

- Allow the user to set up the connection themselves.
- Get the user to log on and have a member of the implementation team set up the connection.

The second option is the more secure as it restricts knowledge of database credentials to a smaller number of people.

Logging in to the Application for the First Time

Note: If upgrading the application from a previous version, refer to the section on [Upgrading from Previous Installations](#). This contains information on changes that may have to be manually made because of the upgrade.

When installing the application for the first time, the first user must log into the Macro Space Management application using the default user provided. This user is:

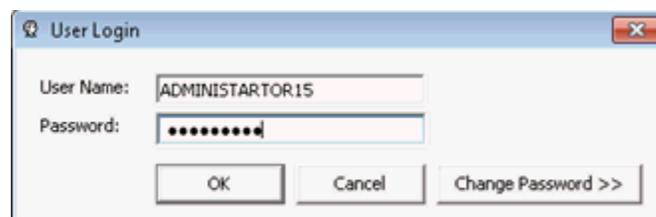
Username: ADMINISTRATOR15

Password: ORMSP2015

Logging in may be initiated by opening the Administration module from either the start menu or shortcuts provided. The log in dialog box will then appear.

The default login will need to be changed on the first time. This is carried out by means of the **Change Password** button on the User Login dialog box.

Figure 6–6 Login dialog box - Change Password



This modified password is the sole means of access for MSM users until additional users are created with Administrator's privileges.

Note: Immediately changing the publicly available password for the default user is necessary to preserve security.

Once logged into the Administration module, it is suggested one or more additional users are created in the Admin User Group (Functional Security option from the Security menu). This will give additional users access to the application and will allow implementation to proceed. The database users that match up to these MSM users should have at a minimum the Administrators role assigned.

Note: See the *Oracle Retail Macro Space Management Administration Module User Guide* for information on creating new users.

Upgrading from Previous Installations

Users upgrading Macro Space Planning from earlier versions will need to take into account the following when upgrading.

Changing Settings in the Configuration Module

This section will affect all users upgrading from **Version 13.3.1** or earlier. This is because the default installation location of the application has been changed to *C:\Oracle Retail\SpacePlanning\MSM*. The directory path to any local directories need to be modified to take into account the changed location.

Changing the Local Directory Paths

The local directory paths are often set to the default folders created when the application is installed. Prior to the 13.3.2 version of the application, the default installation location was *C:\Program Files\Oracle Retail\MSM*. This location has now been changed to *C:\Oracle Retail\SpacePlanning\MSM*. The paths to all local directories need to be changed accordingly.

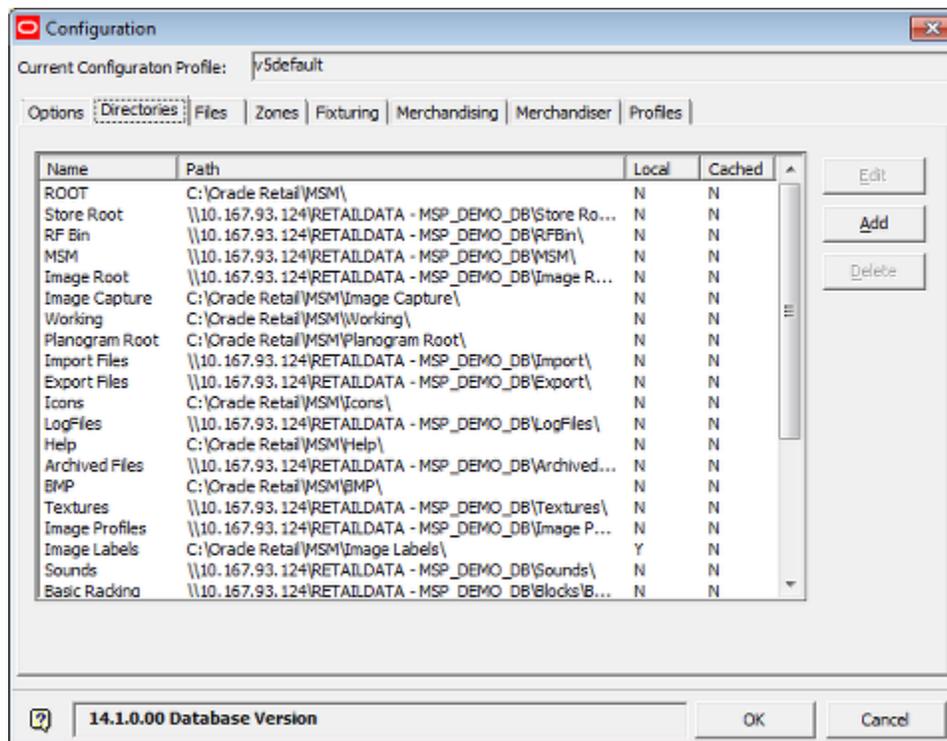
Note: For more information on the MSP directories, see the *Oracle Retail Macro Space Management Configuration Module User Guide*.

Steps to Change Directory Paths

The steps to change the directory paths are as follows:

1. Open the Administration module. This gives access to the full version of the Configuration module.
2. Select Configure from the File menu of the Administration module. The Configuration module will open.
3. Select the Directories tab.

Figure 7-1 Configuration Module - Directories Tab



4. Highlight a local folders. Click **Edit**. Edit the directory path to reflect the changed installation location.
5. Repeat until all local directory paths have been changed to the new location.
6. Click **OK** to save the changes to the database. The configuration module will close.

Changing Settings in Planner

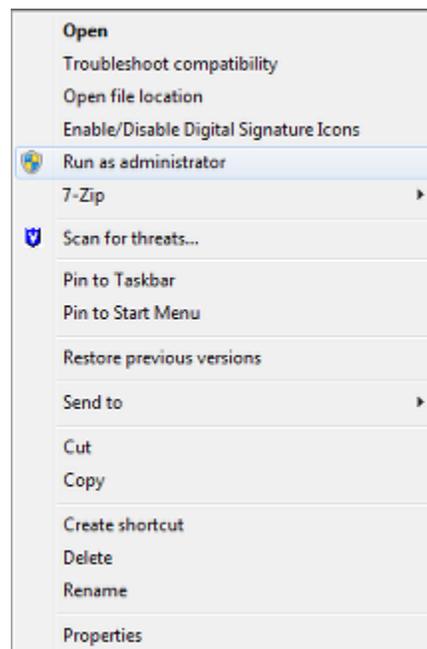
This section describes some simple changes needed the first time Planner is opened. They will be required for each installation of the module.

Getting the Menus and Toolbars to Display

After logging into Planner for the first time, some settings need changing to get the Planner menus and toolbars to display. This section shows one method for doing so - alternative methods may be available.

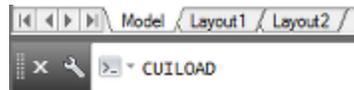
1. When logging into Planner to make these changes, this must be done with Administrator's privileges. To do this, highlight Planner in the list of MSM modules and bring up the right click menu. Select the **Run as Administrator Option**.

Figure 8-1 Right Click Menu



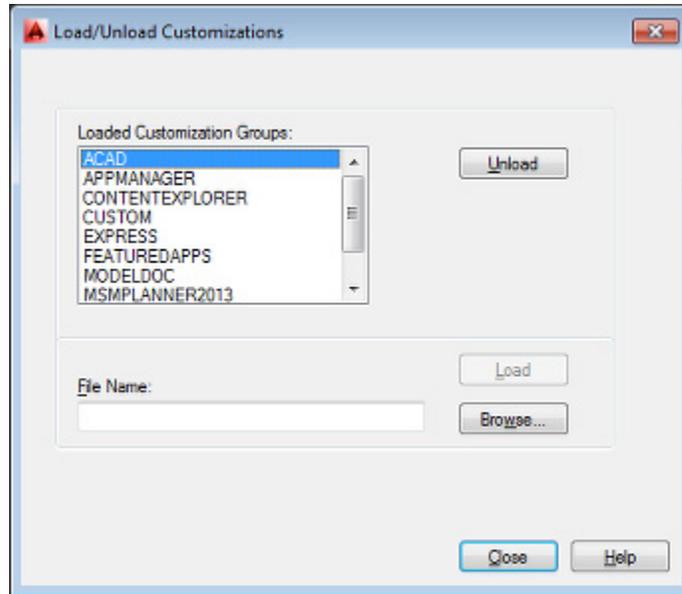
2. After logging into Planner, type **CUILOAD** into the AutoCAD command line and press **Return**.

Figure 8–2 CUILOAD Option

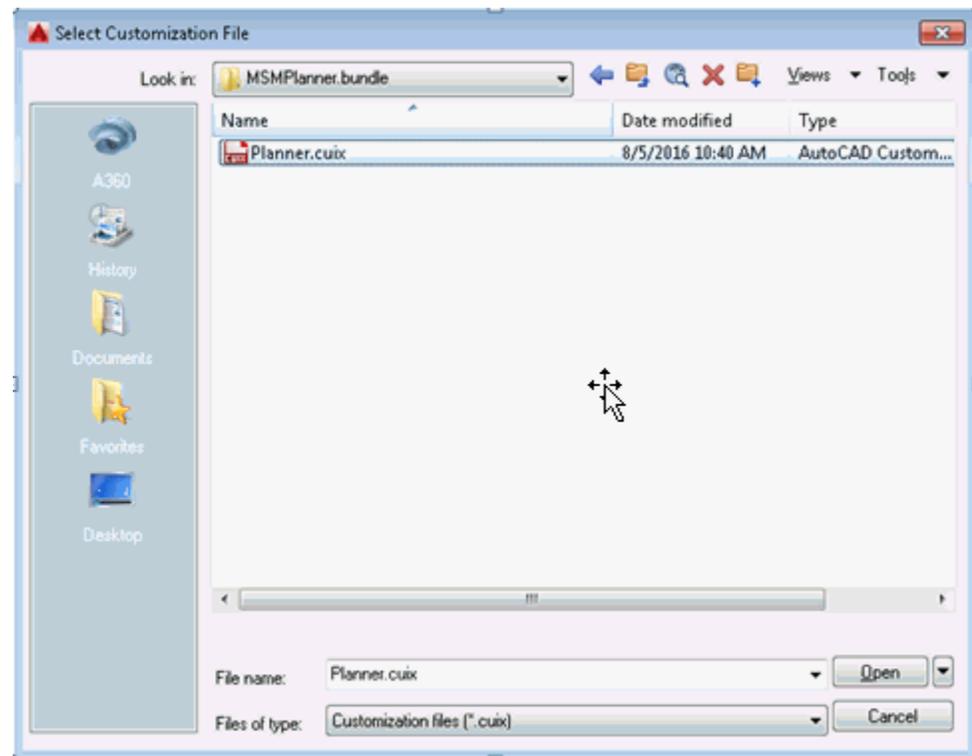


3. The Load/Unload Customizations dialog box will appear. Click **Unload**. All Customization Groups will unload.

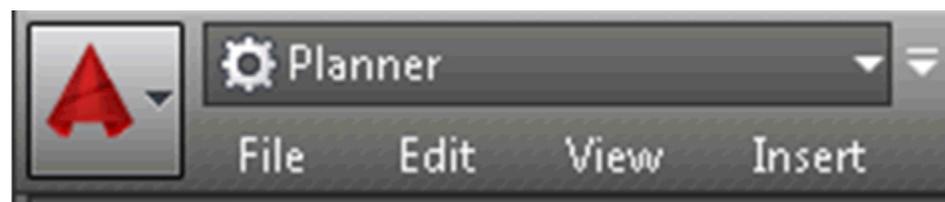
Figure 8–3 Load/Unload Customizations dialog box



4. Click the **Browse** Button. This will bring up the Select Customization File dialog box. This allows users to navigate to the directory required. For AutoCAD installed in the default location this will be *C:\Program Files\Autodesk\ApplicationPlugins\MSMPlanner.bundle*. Select the Planner.cuix file. Click **Open**. The file will then be loaded.

Figure 8–4 Select Customization File dialog box

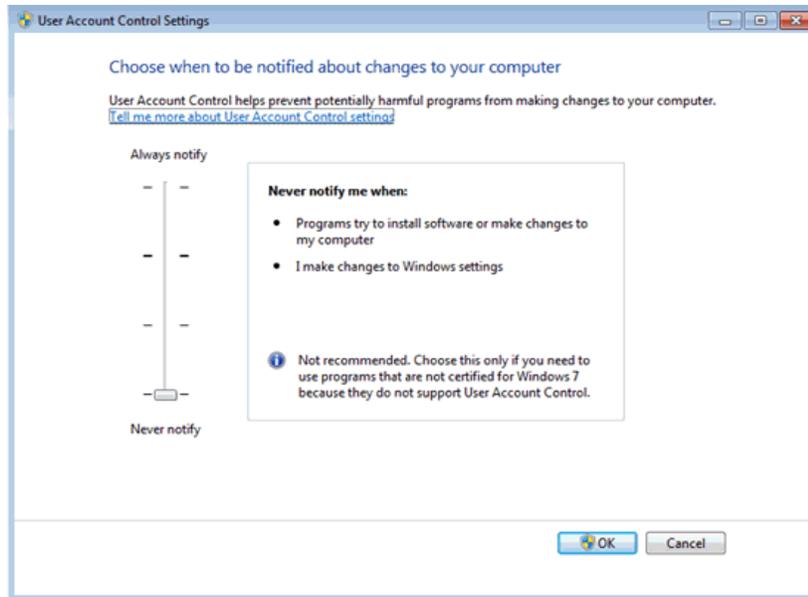
5. The user will be returned to the Load/Unload Customizations dialog box. Click **Load** to load the *Planner.cuix* file. Click **Close** to exit the dialog box.
6. The final stage is to select the **Planner workspace**. This is done using the drop down list to the upper left of the application. All Planner toolbars and Menus should then be available.

Figure 8–5 Selecting Planner Workspace

7. For both WIN 7 and WIN 10 environments, the user accessing Planner should have full permissions over the Planner.cuix file. To do this, take the following steps:
 1. Go to Planner.cuix, available in the C:\Program Files\Autodesk\ApplicationPlugins\MSMPlanner.bundle folder.
 2. Right click and select **Properties**.
 3. Under the **Security** tab, select the relevant user group you are logged in as and assign full permissions. Provide complete control and apply the changes.

8. For both WIN 7 and WIN 10 environments, go to the C:\Program Files\Autodesk\ApplicationPlugins\MSMPlanner.bundle folder. Select the MSPClient file. Right click and select **Properties**. Under the **Security** tab, select the relevant user group you are logged in as and assign full permissions. Provide complete control and apply the changes.
9. For both WIN 7 and WIN 10 environments, UAC (User Account Control Settings) have to be set to **Never Notify** as shown in the figure below. Restart the system for MSM clients to work correctly.

Figure 8–6 User Account Control Settings

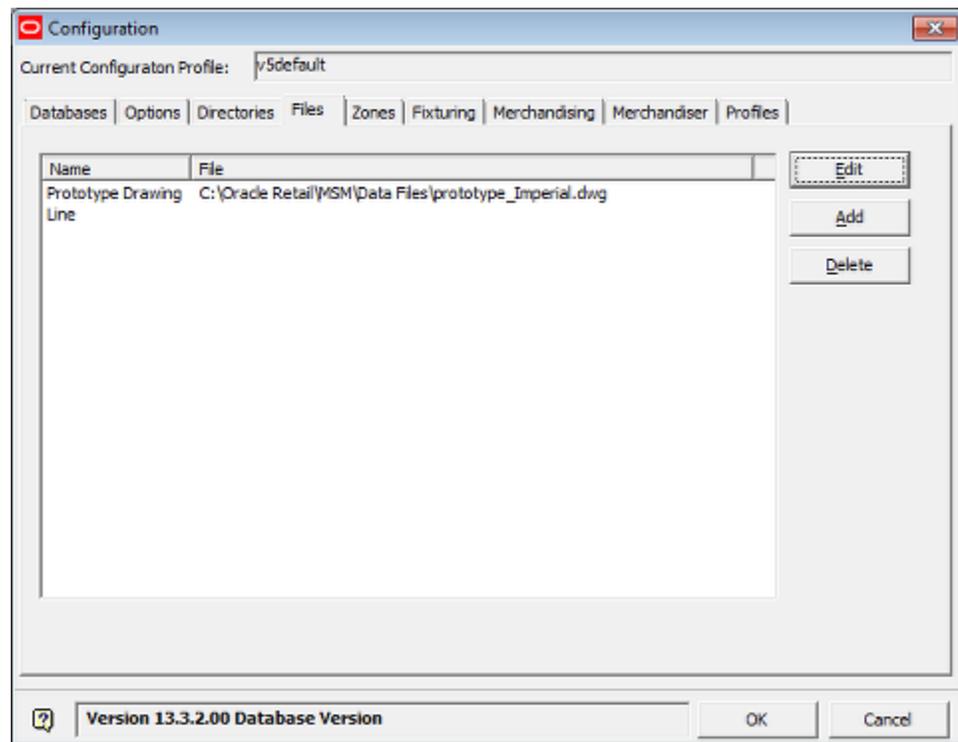


Changing the Drawing Template

When a new blank drawing is opened in Planner, it uses a AutoCAD template to load a series of settings.

The file name and path for the template files is specified in the Files tab of the Configuration Module. This is accessed by logging into the Administration module and selecting configure from the File Menu.

The prototype path in Admin --> Configure (Files) is now updated to use the C:\Program Files (x86)\Oracle Retail\Space Planning\MSM Automation\Common\Prototype.DWG path. This is set by default.

Figure 8-7 Configuration Module - Files Tab

If the path or file name needs to be changed, this is done using the **Edit** button. The path and filename must be consistent for all applications.

Security Options

This section of the *Oracle Retail Macro Space Planning Installation Guide* gives basic guidance on some fundamental security settings. These are provided as Oracle determined defaults. These should be checked against the retailer's security policy and modified as required.

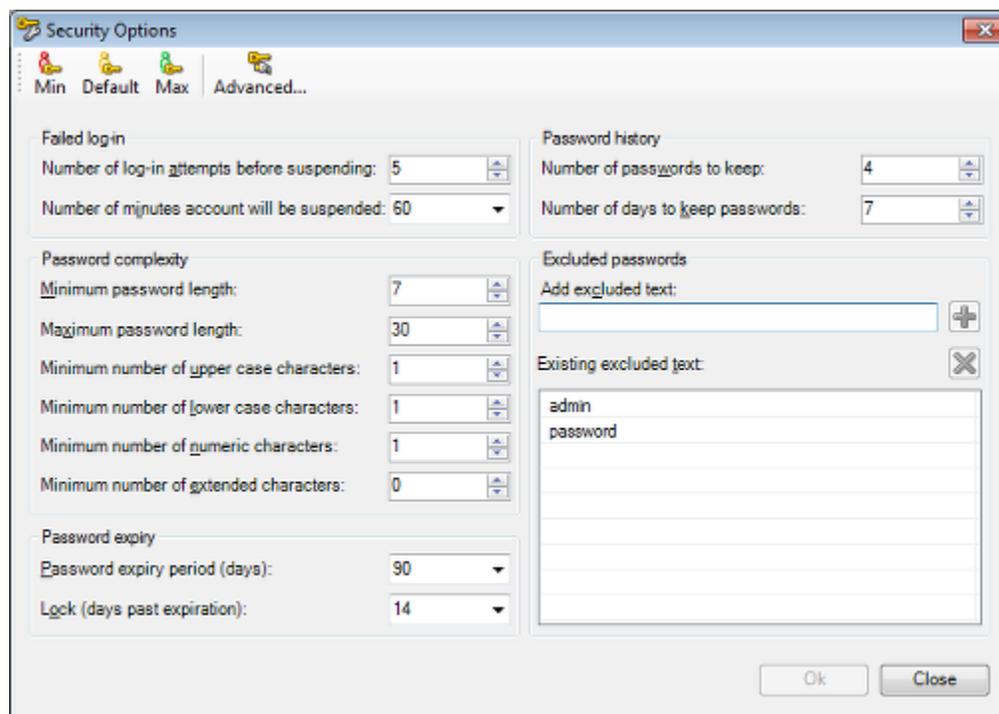
Note: See the *Oracle Retail Macro Space Management Administration Module User Guide* for detailed information on the security options.

Deciding on the Security Options

The available security options can be specified in the Security Options dialog box accessed from the Security menu in the Administration Module in Macro Space Management. The settings should be chosen to conform with the security policies of your specific organization.

Note: If the more significant security options have been changed, there will only be one valid user for the application, with all other user accounts (if existing) having been expired. It is there sensible to set the security policies early in the implementation process before many users have been given access to the application.

When the application is installed, the values will be set to the default settings. These settings must be reviewed against the security policies required by the retail organization using the application.

Figure 9–1 Security Options dialog box

The available settings are:

- **Password Algorithm Strength**

This can be set by clicking **Advanced** on the toolbar. By default, it is set to SHA-256; the lowest strength.

- **Failed Log-ins**

This options allows an administrator to set the number of failed log in attempts allowed before the account is suspended.

- **Password Complexity**

This option allows an administrator to specify the strength of the password required to log into Macro Space Planning.

- **Password Expiry**

This option enables the time period between mandatory password changes to be specified.

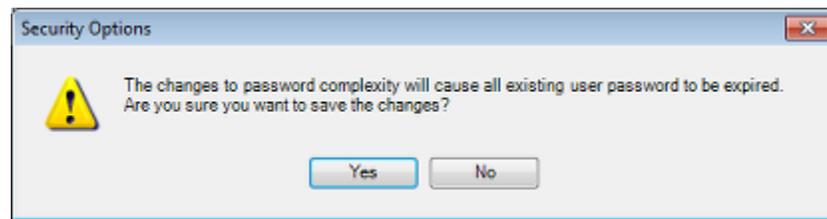
- **Password History**

This option determines the number of previous passwords a user will be prevented from using when a mandatory password change is required.

- **Excluded Passwords**

This option allows an administrator to exclude common passwords that an authorized user might guess in order to access the application.

For significant changes, the user will be asked for confirmation on saving the changed Security Options.

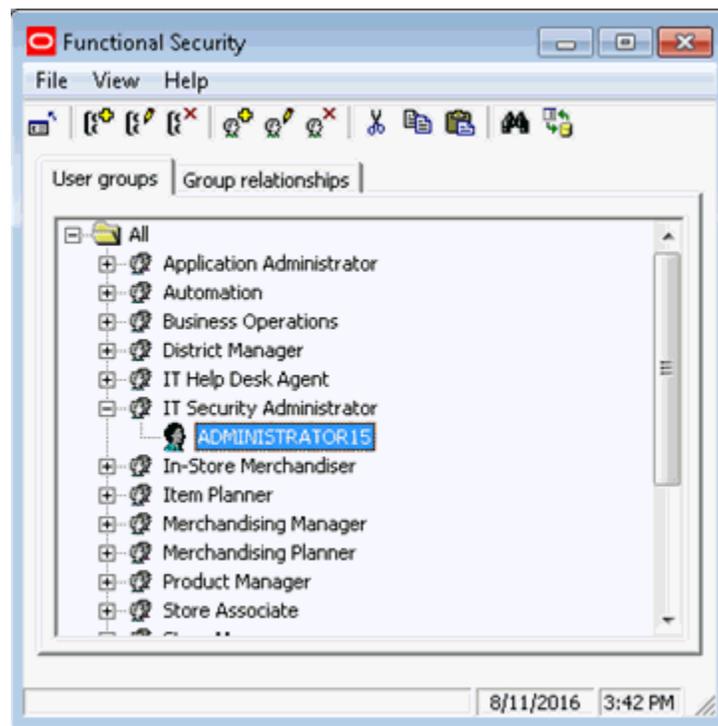
Figure 9–2 Security Option Change Warning

On clicking **OK**, the changes will be saved. The user making the changes will have the only currently valid access to the application.

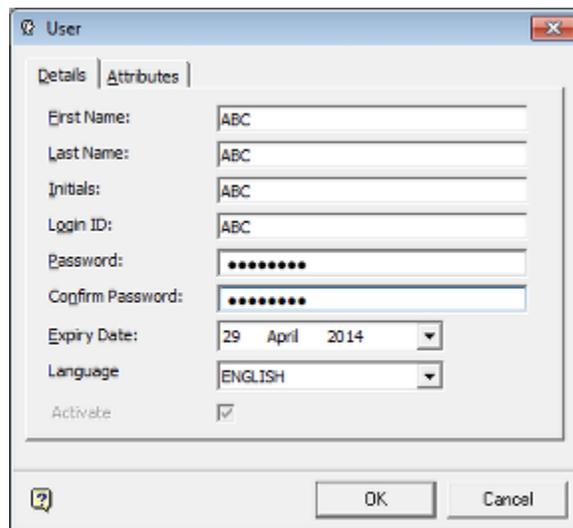
Updating Passwords

If the security options have been changed, there will only be one valid user for the application, with all other user accounts (if existing) having been expired. Any existing accounts will require reactivation. This is done as follows:

1. In the Administration module, select the Functional Security option from the Security menu. This will bring up the Functional Security dialog box.

Figure 9–3 Functional Security Dialog Box

2. In the Functional Security dialog box, highlight a user then select Edit User from the toolbar. The User dialog box will appear.

Figure 9–4 User dialog box

The screenshot shows a 'User' dialog box with two tabs: 'Details' and 'Attributes'. The 'Details' tab is active, displaying the following fields:

- First Name: ABC
- Last Name: ABC
- Initials: ABC
- Login ID: ABC
- Password: [masked with 7 dots]
- Confirm Password: [masked with 7 dots]
- Expiry Date: 29 April 2014 (dropdown menu)
- Language: ENGLISH (dropdown menu)
- Activate:

At the bottom of the dialog box, there are 'OK' and 'Cancel' buttons, and a help icon on the left.

To reactivate the user:

- a. Enter and confirm the new password.
- b. Set the Expiry Date to the previous day. This will force a password change the first time the user logs in with the new password.
- c. Select the Activate text box to make the user account active.

Each existing user account will have to be manually reactivated.

Installing the MSP Server

Note: In-Store Space Collaboration cannot be installed without Macro Space Management first being installed.

This chapter describes how you can install and configure the MSP server. It contains the following sections:

- [Oracle Database Client](#)
- [Before You Begin](#)
- [Windows Firewall Consideration](#)
- [Installing the Macro Space Planning Server](#)
- [Setting Up the Macro Space Planning Server](#)

The ISSC Server application is the server part of the ISSC application suite. The Server application is installed as a service and supplies multiple clients with all the data required for the thin clients rendering of a store drawing and the store hierarchy from the MSM database over a LAN, WAN internet or on a local machine.

The ISSC Server application may be installed onto either a local machine or onto a dedicated server. It is more usual to install the ISSC Server application on a dedicated server.

Oracle Database Client

Any machine the MSP Server Service is installed on also needs a copy of the 64 bit Oracle Database client installed to enable the ISSC Server Service to connect to the database. This requirement applies even if the ISSC Server Service is installed on the same machine as the database.

Before You Begin

For the application to run, a MSM database instance needs to exist. For a new installation, it should be the Template Database. For an upgrade to an existing application, it should already be upgraded to the latest database version by means of upgrade scripts, before attempting to install the upgraded MSP Server.

Many of the actions possible in a store plan opened using the ISSC Server is controlled by settings in the Administration Module of MSM. These include:

- Access rights for Users

- Stores visible to Uses
- Store Plans visible to Users

Until this (and other) information is configured in the Administration Module, no stores or store plans will be accessible in ISSC and Planner.

Note: Details of how to configure the operation of ISSC using the Administration Module of MSM are specified within the User Guide for the *Oracle Retail Macro space Management Administration Module* included with this installation.

Location to Install Files

There are two options for where to install the MSP Server Service.

- Locally on the same computer as the ISSC or Planner Client.
- On a server.

Both options allow users to connect to the Macro Space Planning database. Installing on a server results in easier maintenance and upgrading as only one instance of the client is required. Installing the Server Service on the same computer as the client requires multiple installations of the Server Service.

Previous Installation

If a previous version of the ISSC Server exists on the target machine, you must back up the data and uninstall the application before installing the current version. For more information, see [Removing Previous Versions of the Software](#).

Upgrading the Client

When upgrading from a previous GA release, the Client will require updating as well as the Server service. When applying a patch update it is good practice to update the Client as well. See the *Oracle Retail In-Store Space Collaboration Release Notes* for each release for further information.

Security Advisories

The following information should be taken into account when considering security.

TCP/IP

The server will need a communications (TCP/IP) port to be configured to allow the server and clients to communicate. This port is configurable. If the Server or any of the client machines have firewalls installed, these will need to be configured to allow access for the specified port number. See your network administrators on how this can be set up.

User access rights

When installing the Server application the user must have administrative rights for the local machine.

Windows Firewall Consideration

If your computer has a Firewall configured, you may need to set the firewall to allow ISSC to communicate over the Internet. For more information, see your Network Administrator.

Installing the Macro Space Planning Server

To install the MSP server:

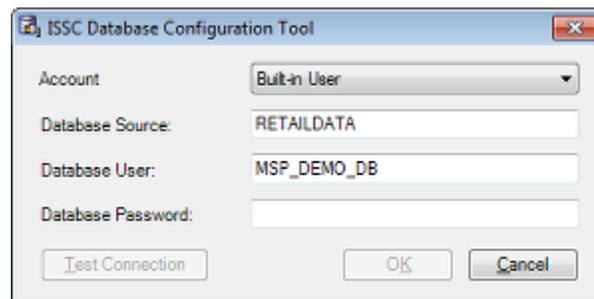
1. Navigate to the location where the installation files are located and double click the **Setup.exe** file. The installation wizard starts.
2. On the **Welcome** screen, click **Next**. The **Select Installation Folder** screen appears.
 - a. Specify the folder the help will be installed.
 - b. Click **Next**. The **Confirm Installation** screen appears.
3. On the **Confirm Installation** screen, click **Install** to start the installation. The installation screen appears showing the progress of the installation.
4. Once the installation has finished the **Installation Complete** window appears. Click **Close**.
5. Restart the system and once the system is restarted, proceed with the configuration. For more information, see [Setting Up the Macro Space Planning Server](#).

Setting up the Connection to the Database

Once the Server Service has been installed, the next stage is to set up the connection to the database. This connection must be set up with the Windows user who will use the connection logged on. If the connection is set up by another users, it will be invalid.

This is done using the ISSCDBConfigTool.exe tool. This is found in the **C:\Program Files\Oracle Retail\Space Planning\Server** folder. Open the tool.

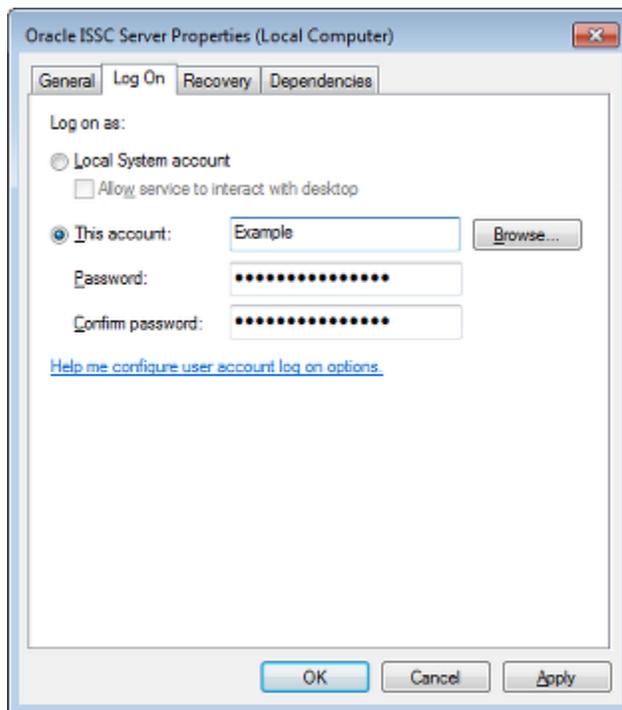
Figure 10–1 Database Configuration Tool



Enter the following Information:

- **Account**
 - This has two options in the drop down list:
 - Built-in user:
 - Current User (Logged in User):

Figure 10–2 Oracle ISSC Server Properties dialog box



- **Database Source**

This will be the name given to the database connection detail in the **tnsnames.ora** file.

- **Database User**

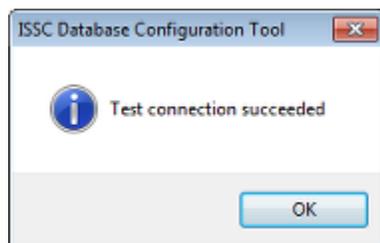
This is User Name for database access.

- **Database Password**

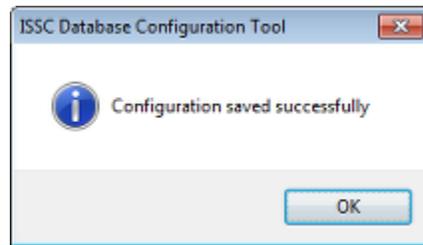
This is the Password for database access.

When this information has been entered, click **Test**. A dialog box will appear reporting on the result of the test. Click OK.

Figure 10–3 Connection Test Result



If the connection details have been correctly entered, click OK on the Database Configuration Tool. A dialog box will appear showing the connection has been save successfully.

Figure 10–4 Configuration Saved Successfully

Click OK and both this dialog box and the Database Configuration Tool will close.

Options for Setting up the Connection

Setting up the database connection requires a knowledge of the credentials to connect to the database. There are two options for doing this:

- Allow the user to set up the connection themselves.
- Get the user to log on and have a member of the implementation team set up the connection.

The second option is the more secure as it restricts knowledge of database credentials to a smaller number of people.

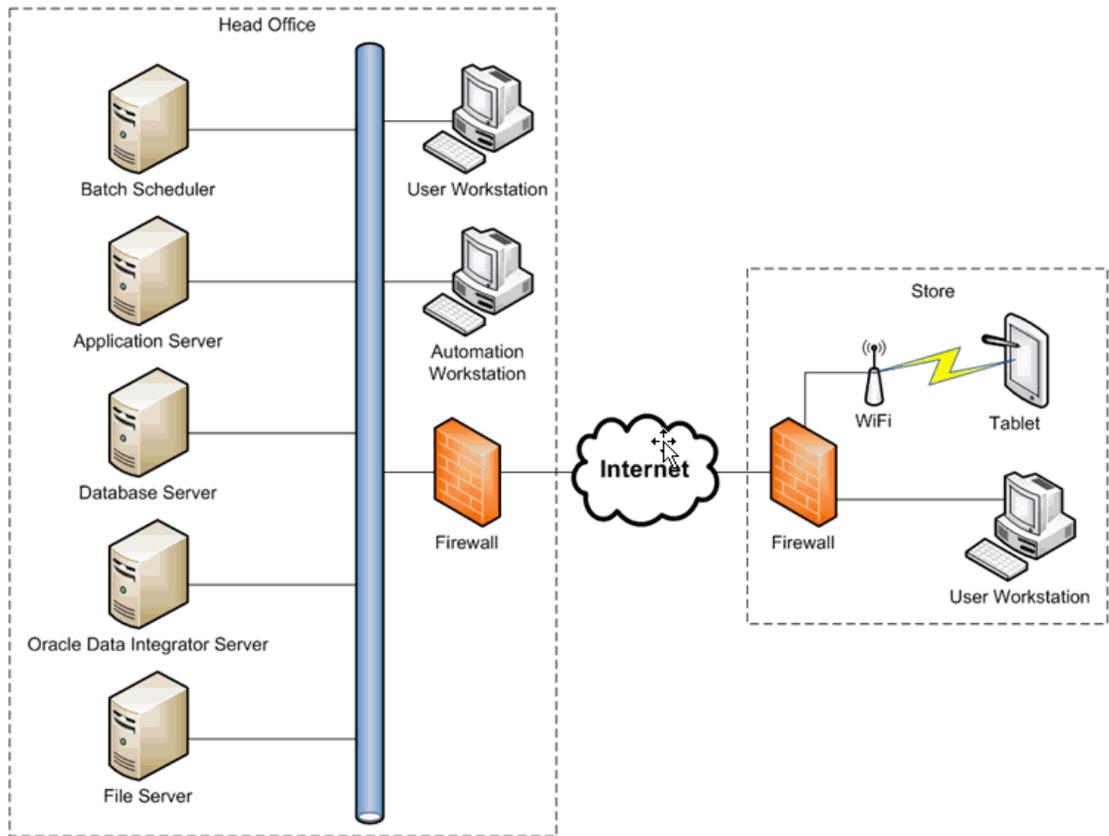
Setting Up the Macro Space Planning Server

This section includes the following sections:

Overview of Connections

The diagram below shows the connections for a generic In-Store Space Collaboration installation. (Details for specific installations may vary slightly.)

Figure 10–5 Connection Details for ISSC Server Service



1. The Client on the each MSP user’s computer communicates to the Oracle Retail Space Planning Server Service on the Macro Space Planning physical server by means of the port specified in the INI file.

Note: In order for this port to be active, the corporate firewall must be configured to allow access to this port.

2. The Oracle Retail Space Planning Server Service on the Macro Space Planning physical server communicates with the database (which may be on another physical server) by running the ISSCDBConfigTool.exe file.
3. The Oracle Retail Space Planning Server Service on the Macro Space Planning physical server accesses files on the physical file server via Windows Authentication. (For ISSC, files can include image files and DWF files used for architectural plans.)

When these connections have been set up, an MSP user at a client workstation will be able to connect with the centrally held information necessary to run the application.

Configuring the MSPServer.exe.config File

The **MSPServer.exe.config** file holds details used by the MSP Server Service connection. It can be found in the C:\Program Files\Oracle Retail\Space Planning\Server folder on the machine the service has been installed on. It is an XML file that can be edited in any standard text editor such as Notepad.

Figure 10–6 Example of XML

```

<listeners>
  <add name="FileLog" />
  <!-- Uncomment the below section to write to the Application Event Log -->
  <!--<add name="EventLog"/>-->
</listeners>

```

Note: For any changes to take effect the ISSC Server Service must be stopped and restarted. Stopping the service will automatically disconnect any existing users connecting via it.

These are series of sections, some of which are commented out. If it is desired to use the commented out sections, the comment can be removed to make the section active. These sections are:

system.serviceModel Element

This section contains two separate XML elements, both called sytem.serviceModel. These are both commented out by default. If you wish to enable ISSC Mobile connections, one of these blocks must have the comments removed to make it active. Only one of these sytem.serviceModel elements can be active at one time or an error will result.

- Put in list of whether elements are for ISSC or ISSC Mobile
- Secure Connection: This option is used for ISSC Mobile connections
- Unsecure connection: This option is used for ISSC Mobile connections
- MSP Server Settings: These are for the MSP connection

Secure Connection

This section provides the ISSC Mobile server settings for a secure connection using SSL. These are the recommended settings for a production environment. The port used by the connection can be configured by changing the **baseAddress** element as shown in the screenshot below. This port should match the one used in the **connection.js** file when configuring the ISSC Mobile client.

Figure 10–7 Secure Port Number Setting

```

<baseAddresses>
  <add baseAddress="https://localhost:8080/ISSCMobile/" />
</baseAddresses>

```

Note: This port must also match the port used when associating a mobile SSL certificate. See the section in installing ISSC Mobile for more details.

Unsecure Connection

This section provides the ISSC Mobile server settings for a unsecure connection. It is not recommended that these settings are used in a production environment. The port used by the connection can be configured by changing the **endpoint** element as shown

in the screenshot below. This port should match the one used in the **connection.js** file when configuring the ISSC Mobile client.

Figure 10–8 Unsecure Port Number setting

```
<endpoint address="http://localhost:8080/ISSCMobile" binding="webHttpBinding"
  contract="Oracle.Retail.MSP.Workflow.Entry.ISSCServices.IISSCContract"/>
```

applicationSettings Element

This section provides the settings used by ISSC.

Secure_Connection

This option enables secure communication between client and server using SSL. If this item is set to True, the **Certificate_Store_Location**, **Certificate_Store_Location**, **Certificate_Find_Value** and **Certificate_Find_Type** elements must have the pertinent values specified.

Connection_Port

This specifies the connection port used by the ISSC service. The port number specified in any of the **IPAddress_1** to **IPAddress_10** elements in use in the **ISSC.exe.config** & **MSPClient.config** file used to configure the client must match the value in this field.

Certificate_Store_Location

This option specifies the location of the Windows Certificate Store.

Certificate_Store_Name

This option specifies the name of the Windows Certificate Store to search in.

Certificate_Find_Value

This option holds the value to be searched for when identifying the certificate. The value is that defined by the **Certificate_Find_Type** element.

Certificate_Find_Type

This option specifies the search criteria - for example whether to search by **SubjectDistinguishedName**.

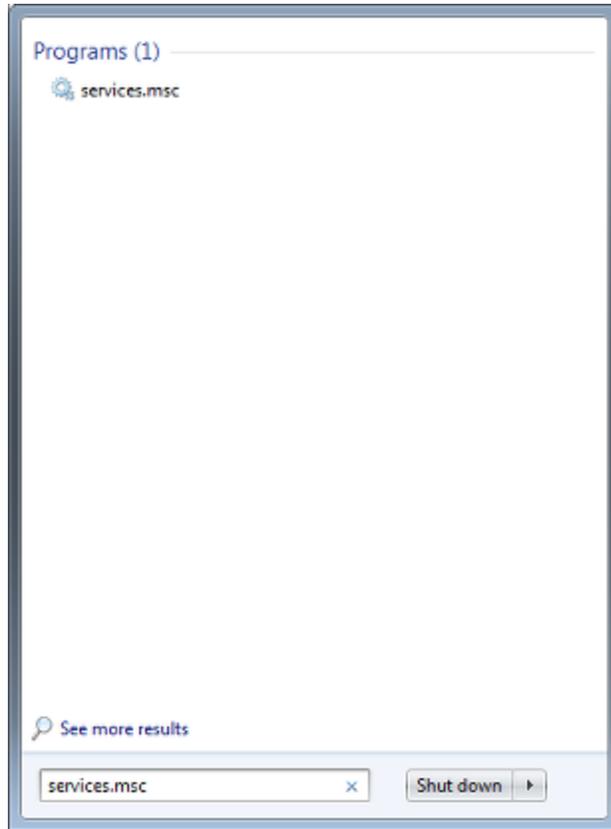
Configuring the Service

The MSP service should be configured with the "NETWORK SERVICE" account.

To configure this service:

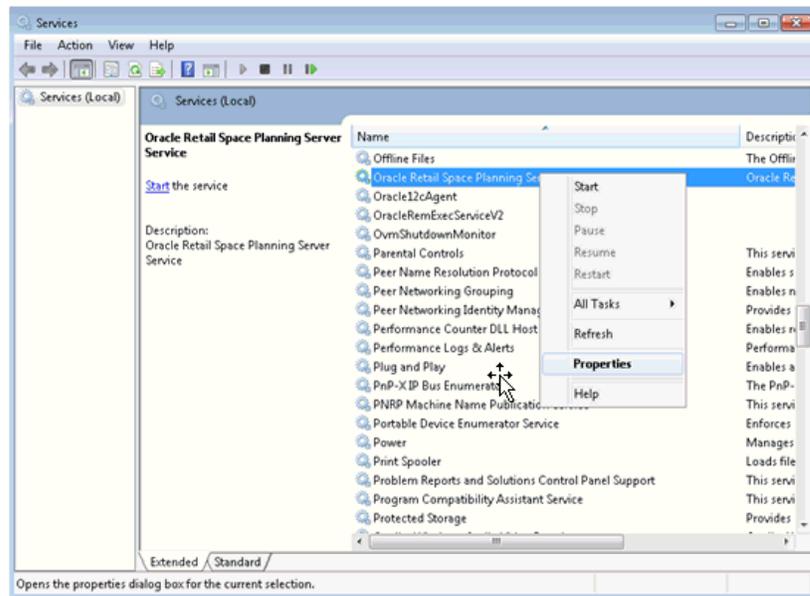
1. Open the Windows **Start** menu, and type **services.msc** in the text box. Double click the **services.msc** option under programs.

Figure 10–9 Windows Start Menu



2. The Services dialog box will appear. Highlight the **Oracle Retail Space Planning Server Service** service bring up the right click menu. Select **Properties**.

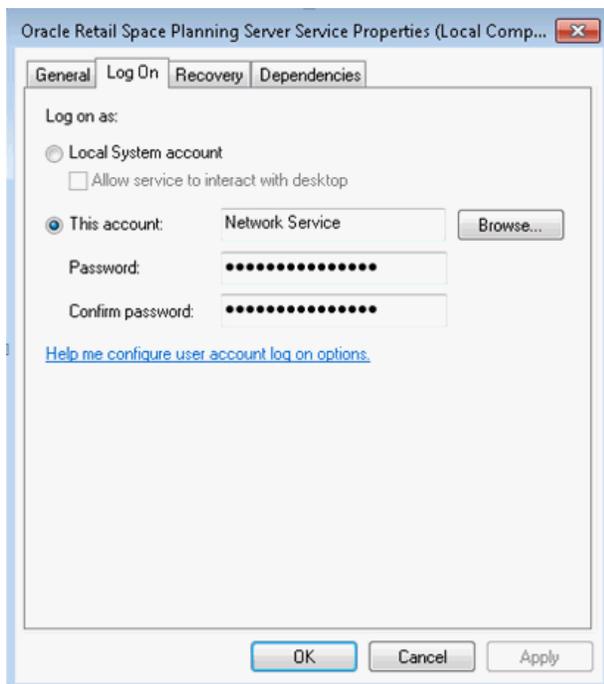
Figure 10–10 Services dialog box - Properties Menu



The Services window appears.

3. Confirm that in the **Log On** tab, the user specified matches the user selected in the **Database Configuration Tool** when the database connection was set up.

Figure 10–11 Service Properties dialog box - Log On Tab

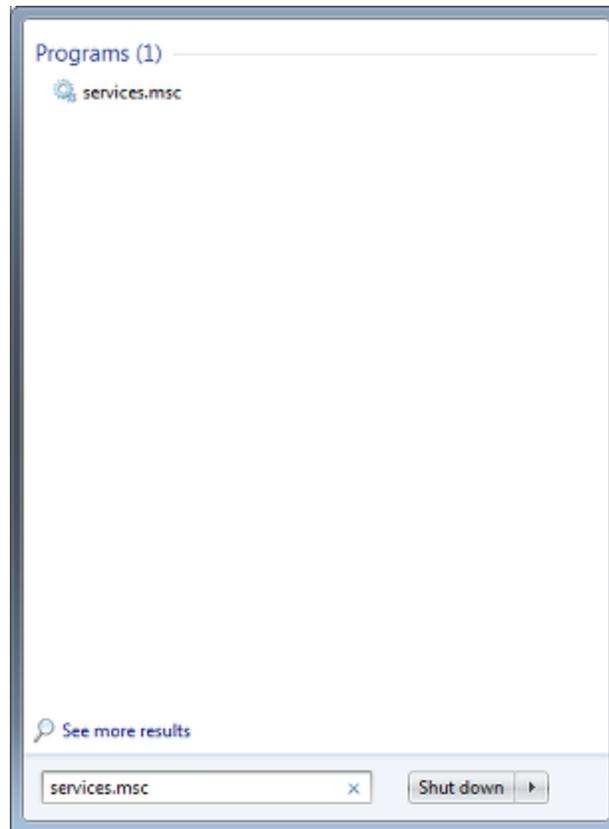


4. Confirm this configuration and click **OK**.
5. For the changes to take effect, restart the Oracle Retail Space Planning Server Service. (This can be done in the Services dialog box.)

Starting the Service

The MSP service, by default, installs without the service starting. Before any MSP Client can connect to the MSP Server Service, this service must be started. To do this:

1. Open the Windows **Start** menu, and type **services.msc** in the text box. Double click the services.msc option under programs.

Figure 10–12 Windows Start Menu

2. The Services dialog box will appear. Highlight the **Oracle Retail Space Planning Server Service** bring up the right click menu. Bring up the right click menu and select **Start**. The server service will now be started.

Note: The Server Service will have to be restarted each time.

Installing the ISSC Client

Note: Installation of the ISSC Client is optional. It should only be installed if you are installing the ISSC application. ISSC cannot be used without MSM being installed.

This chapter describes how you can install and configure the ISSC client application. It includes the following sections:

- [Before You Begin](#)
- [Firewall Considerations](#)
- [Installing the In-Store Space Collaboration Client](#)
- [Setting Up the ISSC Client](#)

Before You Begin

The following information should be taken into account before the ISSC Client is installed.

Previous Installation

If a previous version of ISSC Client exists on the target machine, you must uninstall the application before installing the current version. For more information, see [Removing Previous Versions of the Software](#).

Upgrading the Server Service

When upgrading from a previous GA release, the Server Service will require updating as well as the client. When applying a patch update it is good practice to update the Server Service as well. See the *Oracle Retail In-Store Space Collaboration Release Notes* for each release for further information.

Security Advisories

The following should be taken into account before installing the ISSC Client.

TCP/IP

The client will need a communications (TCP/IP) port to be configured to allow the Client application to communicate to the Server application. This port is configurable, see [Setting Up the Macro Space Planning Server](#). If the Server or any of the client

machines have firewalls installed these will need to be configured to allow access for the specified port number. See your network administrators for advice on doing this.

User access rights

When installing the Client application the user must have Administration rights for the local machine.

Firewall Considerations

If your computer has a Firewall configured, you may need to set the firewall to allow ISSC to communicate over the Internet. For more information, see your Network Administrator.

Installing the In-Store Space Collaboration Client

To install the Client application:

1. If the Client application has been delivered in a compressed file format, for example, WinZip, extract the installation files to a temporary folder that can be accessed by the user.

Note: It is recommended that this folder is on a network server machine so that all target Client machines can access the installation files.

2. Navigate to the location where the installation files are located and double-click the **Setup.exe** file. The installation wizard starts.
3. On the **Welcome** screen, click **Next**. The **Select Installation Folder** screen appears.
4. On the **Select Installation Folder** screen, select the installation location.
5. Click **Next**. The **Start Copying Files** screen appears.
6. On the Install screen, click **Start Copying Files** to start the installation. The Setup Status screen appears showing the progress of the installation.
7. Once the installation has finished the **Installation Wizard Complete** window appears. Click **Finish**.

Setting Up the ISSC Client

The configuration of the client application is controlled by a file in the installation folder. Navigate to the folder and open the ISSC.exe.config file, using a text editor such as Notepad.exe. The following is an example of the contents of the file:

Figure 11–1 Example of XML file

```
<Oracle.Retail.MSP.Presentation.Legacy.Properties.Settings>
  <setting name="Secure_Connection" serializeAs="String">
    <value>True</value>
  </setting>
  <setting name="IPAddress_1" serializeAs="String">
    <value>0.0.0.0:7001</value>
  </setting>
```

SecureConnection

This element tells the client whether the connection is secure (SSL) or not. Set to True for a secure connection; False if it is not. If this is turned on, the **Secure_Connection** settings must be defined in the **MSPServer.exe.config** file for the MSP Server Service.

IPAddress1

This element tells the client the host name or IP address of the default machine where the Server application is installed followed by a colon and the port number. It is required if the Server application is on a different machine to the Client. The port number must be set to the same number that has been set in the **MSPServer.exe.config** file on the machine where the Server application is installed.

IPAddress2 to IPAddress10

These are alternative host name or IP address for alternative servers holding a copy of the MSP Server Service. If the client fails to connect to the default IP Address in the **IPAddress1** element, it will work through alternative IP Addresses to see if an alternative server is available. This allows redundancy when creating a connection to the MSP Server Service.

ValidateServerCertificate

This option tells the functionality whether to validate the server certificate or not. By default it is set to True (On). The option will only be used if the secure connection is in use. In this case this option can be used to validate the certificate.

CheckRevokedCertificates

This option tells the functionality whether to check whether the server certificate has been revoked or not. By default this is set to True (on). The option can be used to check the certification is still valid each time the user connects.

LoggingEnabled

This option allows logging on connection and communication information for that specific client. Information is written to the **%USERPROFILE%\AppData\Local\Oracle Retail\ISSC\Log File** folder on the user's computer. This option is set to True (on) by default. It can be used to help support staff by local logging of problems.

KeepCacheDays

This option specifies the number of days that DWF files and product images are cached on the client. The default is 0 which means the information will be refreshed the next time the client is loaded. A value greater than 0 will result in the information not being refreshed until that number of days has expired.

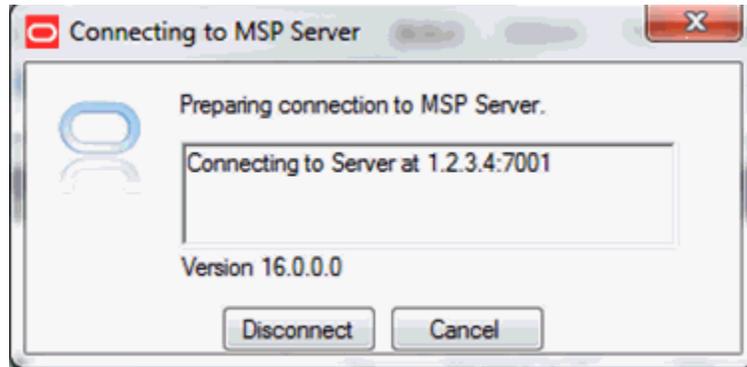
ProfileImagesZ

This option specifies the size in pixels that profile images are loaded at. If the value is zero, the source image size is used. The same value will be used for both dimensions.

HideConnect

This option tells the client whether to hide the initial connection dialog box when the Login dialog box appears. By default it is set to show it (False).

Figure 11–2 Initial Connection dialog box



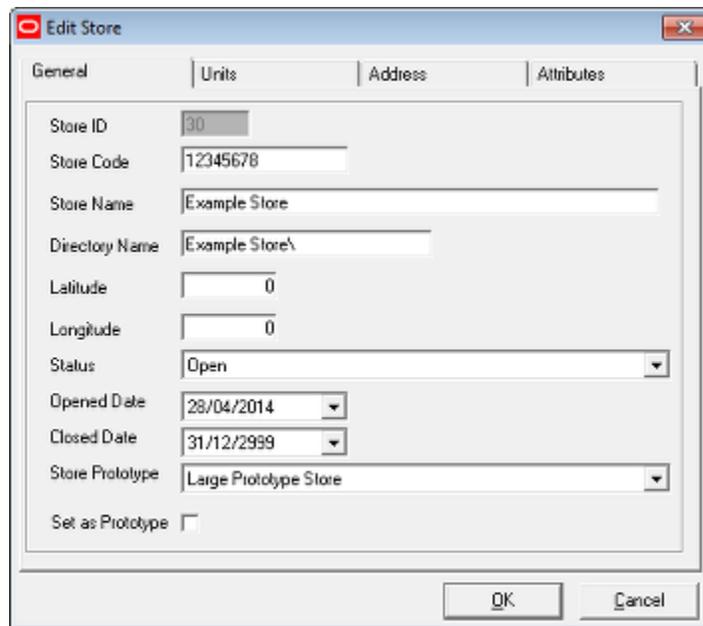
ProductImagesZ

This option specifies the size in pixels that product images are loaded at. If the value is zero, the source image size is used. The same value will be used for both dimensions.

Store

The store setting gives the option of having the client open a specific store when it is started. It references any assigned store code. These can be seen in the Add/Edit Store dialog box in the Store Manager module in Macro Space Management.

This can be set to any Store Code in an existing store hierarchy, but cannot be configured at this stage if the application is being installed for the first time and the database has not yet been populated with store information.



Note: For existing store hierarchies, other stores can still be accessed. By specifying a particular store in the ISSC.xml file, the store hierarchy will open by default at this store. This is typically used when ISSC is in use at a specific store - this enables the application to open at that store by defaults - saving time.

For the changes to take effect, you must restart the Client application.

Installing the ISSC Help

Note: In-Store Space Collaboration cannot be installed without Macro space Management first being installed.

This chapter describes how you can install and configure the Online Help. The Help application contains a set of help files that can be installed either locally or remotely to the ISSC client, with the client itself calling the file when the user clicks the Help button.

This chapter includes the following sections:

- [Before You Begin](#)
- [Windows Firewall Consideration](#)
- [Installing the Online Help](#)
- [Configuring the path to the In-Store Space Collaboration Help](#)

Before You Begin

The Help application installs the ISSC help file catalogue which is called by the ISSC client (the Client application).

Previous Installation

If a previous version of ISSC Help exists on the target machine, you must back up the data and uninstall the application before installing the current version. For more information, see [Removing Previous Versions of the Software](#).

Third Party Software Requirements

The application requires the following applications to run as expected.

- .Net Framework 3.5
- Internet Explorer 8 (configured to accept Active X content)

Security Advisories

Before installing ISSC Help, the following information should be taken into account.

User Access Rights

When installing the Help application you must have administrative rights for the local machine. If installing on a central networked machine, the ISSC folder that the Help application creates when installing, must be configured to allow access from all client systems. For example, if the Help is installed on a server machine and the default installation path (*C:\Program Files\Oracle Retail\Space Planning\ISSC\ISSC Help*) was accepted; the folder will need to be shared on the server machine with read permissions. This ensures that every client system can access the help file in this folder.

Database Permissions

If the Help application is installed on a networked machine, it will be necessary to update the path where the Client application searches for the help file in the application database. Database read/write permissions will therefore be required to update the table where this path is stored to be able to achieve this.

Windows Firewall Consideration

If your computer has a Windows Firewall configured, you may need to set the firewall to allow ISSC. For more information, see your Network Administrator.

Installing the Online Help

To install the Help application:

1. If upgrading from a previous version, you must remove the Help application from the system. For more information, see [Removing Previous Versions of the Software](#).
2. Navigate to the location where the installation file is located and double click the **Setup.exe** file. The setup wizard will then start.
3. On the **Welcome** screen, click **Next**. The **Select Installation Folder** window appears.
4. On the **Select Installation Folder** screen:
 - a. Specify the folder the help will be installed to and note the location.
 - b. Depending on your organization's IT policies, select the **Everyone** or **Just Me** option.

Note: Selecting Everyone or Just Me will not affect who can view the help; just who can subsequently modify or update it.

- c. Click **Next**. The **Confirm Installation** screen appears.
5. On the **Confirm Installation** screen, click **Next** to start the installation.
The installation screen appears showing the progress of the installation.
6. Once the installation has finished the **Installation Complete** window appears. Click **Close**.

Configuring the path to the In-Store Space Collaboration Help

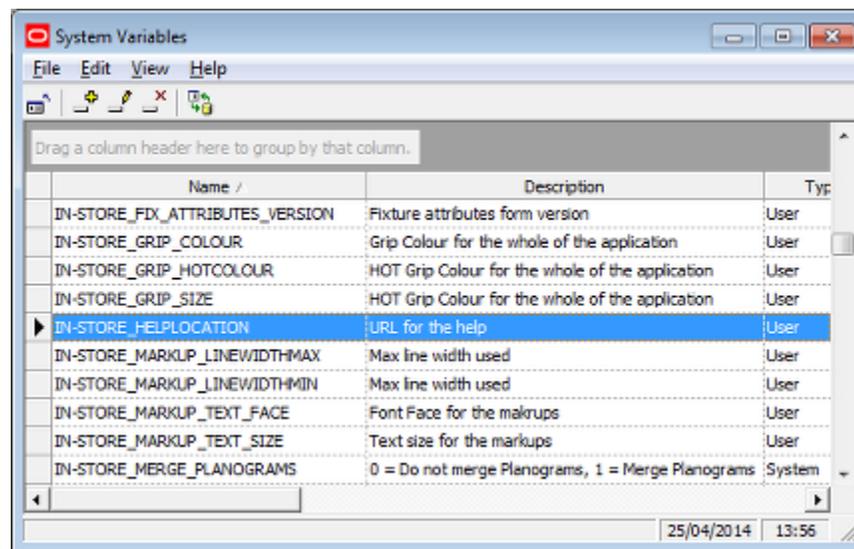
During installation, the Help application creates a number of sub-folders and files in the target installation directory. (If the default installation path is accepted, this directory will be *C:\Oracle Retail\Space Planning\ISSC\ISSC Help*).

Note: If re-installing help because the installation is being upgraded from an earlier one, the location of help will have changed from *C:\Program Files\Oracle Retail\ISSC\ISSC Help*. This will require the path specified in the Administration module to be changed. See [Configuring the path to the In-Store Space Collaboration Help](#).

The *In-Store_Space_Collaboration.htm* file in the root of the installation path acts as an index to the entire help system. This is the file that the Client application calls when the help button is pressed on In-Store Collaboration toolbar.

In order for In-Store Space Collaboration Help to be called from the application, the location and file name must be specified as a system variable. This is done by selecting the System Variable option from the General Menu in the Administration Module in Macro Space Planning.

Figure 12–1 System Variable dialog box in MSM Administration Module



The path to and name of the *In-Store_Space_Collaboration.htm* file is then stored in the IN-STORE_HELPLOCATION system variable.

Once the System Variable has been updated, restart the ISSC server for the Client applications to read the new help file path location. This can be achieved as follows:

1. From the **Start** menu, open the Windows Run dialog by selecting **Run...**
2. In the **Run** dialog, type **services.msc**, and press **OK**. The **Services** window appears.
3. Select the **Oracle ISSC Server** entry in the **Services** window and click **Restart**. Restarting the ISSC Server Service will disconnect all users from the database so this should be done at a specified time.

Note: Installation on a server machine is usually the most convenient option as help only has to be installed once. Installing it on each machine that hosts the Client involves a lot of duplication of effort.

Opening ISSC for the First Time

This section of the Oracle Retail Macro Space Planning Installation Guide contains information for users installing In-Store Space Collaboration (ISSC) and opening the module for the first time.

Overview of Opening ISSC for the First Time

When In-Store Space Collaboration is opened for the first time after implementing the application, there are constraints on access:

- Only members of the Admin User Group will have access to the ISSC toolbar.
- No access will be available for any stores and floor plans that might have been created.

This section provides a brief introduction to granting access. For more information see the *Oracle Retail Macro Space Management Administration Module User Guide*.

Access to the ISSC Toolbar

Access to the ISSC toolbar is controlled via the AVTTB_MESSAGE_USER_GROUP_LINK table in the database. Only members of the Admin User Group have access when ISSC is first installed. In order to give other user groups access to the ISSC toolbar, the following actions are required:

1. A User Group is created using the Functional Security dialog box accessed from the Security Menu in the Administration Module of Macro Space Management (MSM).
2. The USG_ID (User Group ID) for that User Group is identified in the AVTTB_MESSAGE_USER_GROUP_LINK table in the database.
3. An insert statement is run against the database:

```
Insert into AVTTB_MESSAGE_USER_GROUP_LINK
Select [User Group ID], MSC_ID, MUG_PERMISSION_MASK
from AVTTB_MESSAGE_USER_GROUP_LINK where USG_ID = 1
```

where the value of [User Group ID] is the USG_ID identified from the AVTTB_MESSAGE_USER_GROUP table.

Access to Stores and Floor Plans

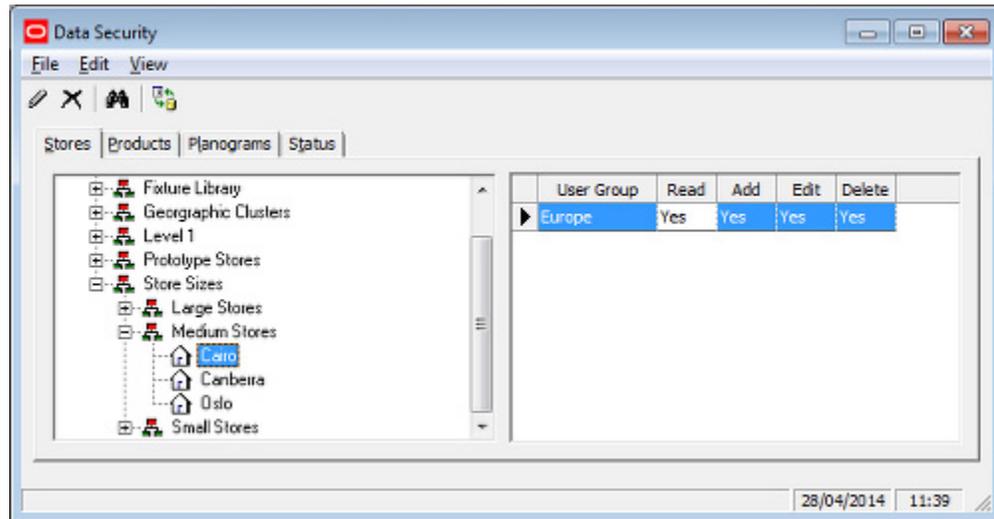
Access to stores and floor plans in ISSC is configured in the Data Security dialog box of the Administration Module of MSM — this is accessed from the Security menu. This

requires permissions to be granted for the stores it is wished to access and the statuses for the stores and floor plans it is wished to view.

Giving Access to Stores

Access to stores is granted in the Stores tab of the Data Security dialog box.

Figure 13–1 Data Security Dialog Box - Stores Tab

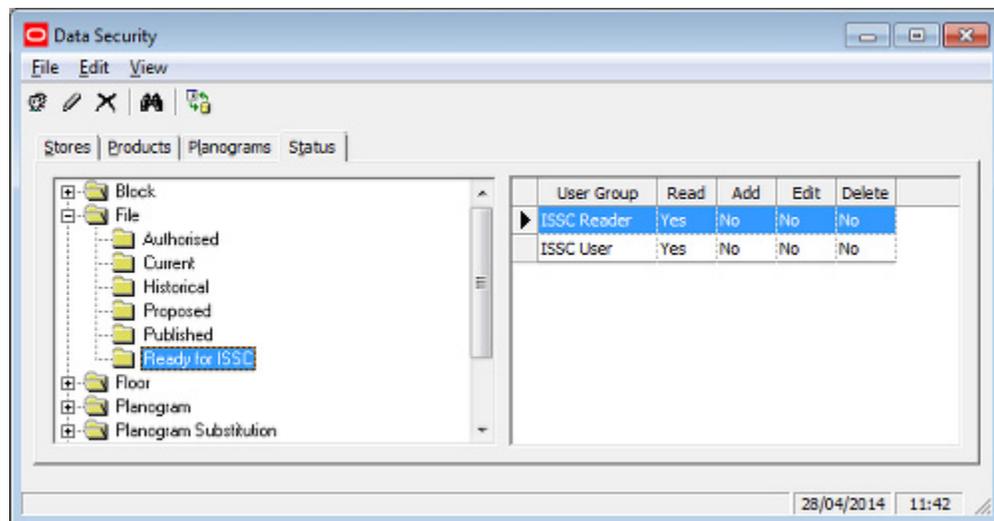


Only User Groups with permissions to view a specific store will be able to view that store in the Select Store dialog box that appears when ISSC is opened.

Giving access to Floor Plans

Access to floor plans is granted in the Status tab of the Data Security dialog box.

Figure 13–2 Data Security Dialog Box - Status Tab



Only User Groups with permissions to see both a store at a specific status and a floor plan (file) at a specific status will be able to see those floor plans when they select a Revision in the Select Store dialog box that appears when ISSC is opened.

Installing ISSC Mobile

This section describes how to deploy the ISSC Mobile client. This task would generally be carried out by someone with experience of deploying iOS applications.

Introduction

The ISSC Mobile client is supplied as a JDeveloper mobile application archive supplied as a file with the .maa extension. The installation process is described in the following Oracle documentation: [Oracle Fusion Middleware Oracle JDeveloper Tutorials](#). This must be for JDeveloper version 12.2.1. This process is described in detail - a brief outline is given below.

Configuring the ISSC Server Service

The ISSC Mobile client connects to the ISSC Server Service. For it to do this, the MSPServer.exe.config XML file must be configured accordingly. See the chapter on configuring the ISSC Server Service for how to do this.

Overview of ISSC Mobile Installation

The ISSC Mobile install takes place in the following stages:

1. Installing and Setting up the Mobile Application Framework (MAF) Mobile environment.
2. Importing the .maa file.
3. Configuring the server address.
4. Creating a White List.
5. Deploying to the Mobile device.

Setting up the MAF Mobile Environment

The first stage is to set up the MAF environment. This is covered in Section 2: [Setting up the Development Environment of the Mobile Application Framework Installing Oracle Mobile Application Framework](#) documentation.

The purpose of setting this up is to have an environment capable of generating iOS applications.

Importing the .maa File

The second stage is to import the .maa file. This is covered in Section 2: Getting Started with MAF Application Development of the [Oracle® Mobile Application Framework Developing Mobile Applications with Oracle Mobile Application Framework](#) documentation.

The .maa file contains the source code for the ISSC Mobile client. Importing the delivered maa file can be done through the steps covered in [Importing the Delivered Mobile Application Archive](#).

Configuring the Server Address

The next stage is to configure the server address; this is the URL and port number of the server containing the ISSC Server Service that the ISSC Mobile client will use to connect to the Macro Space Planning Database.

This is done by altering the return value in the connection.js file. This can be found in within the *ViewController\public_html\ISSCSpecific* folder. The return value of the GetConnectionDetails function needs to be changed to the pertinent value.

Creating a White List

The next stage of the process is to create the white list. For MAF 2.3.x you need to have external plugin apart from the core plugin provided by Apache Cordova that comes with MAF 2.3.x.

MAF 2.2.x and older versions provide direct support for whitelisting. You can add remote urls to be whitelisted in maf-applications.xml file. But, MAF 2.3 no longer provides direct support for whitelisting. So for whitelisting remote urls in MAF 2.3.x, we need to register an external plugin into our maf-application.xml file, apart for core plugins provided by Apache Cordova that comes with MAF , which will also create an entry in maf-plugin.xml file.

The URL added to the White List must match the server URL set when the server address was configured in the previous stage.

This is covered in section 20.3 **Whitelisting URLs in MAF Application** section of [Mobile Application Framework Developing Mobile Applications with Oracle Mobile Application Framework](#).

Follow these steps:

1. In the project browser, go to Application Resources>Descriptors>ADF META-INF>maf-application.xml
2. Select Plugins tab in maf-application.xml overview window.
3. In Additional Plugins block, click on + (plus) button.
4. Select the external plugin xml file created by you as mentioned in section 20.3 Whitelisting URLs in MAF Application of:

[Mobile Application Framework Developing Mobile Applications with Oracle Mobile Application Framework](#)

5. See the modification in maf-plugins.xml file.
6. Save your project.

Deploying to the Mobile Device

The final stage of the process is to deploy the ISSC Mobile client to the mobile device. This is covered in Section 27.4: Deploying MAF Applications in the:

[Oracle® Mobile Application Framework Developing Mobile Applications with Oracle Mobile Application Framework documentation.](#)

Appendix: Installation Order

This section provides a guideline for the order in which the Oracle Retail applications should be installed. If a retailer has chosen to use only some of the applications, the order is still valid, less the applications not being installed.

Note: The installation order is not meant to imply integration between products.

Enterprise Installation Order

1. Oracle Retail Merchandising System (RMS), Oracle Retail Trade Management (RTM)
2. Oracle Retail Sales Audit (ReSA)
3. Oracle Retail Extract, Transform, Load (RETL)
4. Oracle Retail Warehouse Management System (RWMS)
5. Oracle Retail Invoice Matching (ReIM)
6. Oracle Retail Price Management (RPM)
7. Oracle Retail Allocation
8. Oracle Retail Mobile Merchandising (ORMM)
9. Oracle Retail Customer Engagement (ORCE)
10. Oracle Retail Xstore Office
11. Oracle Retail Xstore Point-of-Service, including Xstore Point-of-Service for Grocery, and including Xstore Mobile
12. Oracle Retail Xstore Environment
13. Oracle Retail EFTLink
14. Oracle Retail Store Inventory Management (SIM), including Mobile SIM
15. Oracle Retail Predictive Application Server (RPAS)
16. Oracle Retail Predictive Application Server Batch Script Architecture (RPAS BSA)
17. Oracle Retail Demand Forecasting (RDF)
18. Oracle Retail Category Management Planning and Optimization/Macro Space Optimization (CMPO/MSO)
19. Oracle Retail Replenishment Optimization (RO)

20. Oracle Retail Regular Price Optimization (RPO)
21. Oracle Retail Merchandise Financial Planning (MFP)
22. Oracle Retail Size Profile Optimization (SPO)
23. Oracle Retail Assortment Planning (AP)
24. Oracle Retail Item Planning (IP)
25. Oracle Retail Item Planning Configured for COE (IP COE)
26. Oracle Retail Advanced Inventory Planning (AIP)
27. Oracle Retail Integration Bus (RIB)
28. Oracle Retail Services Backbone (RSB)
29. Oracle Retail Financial Integration (ORFI)
30. Oracle Retail Bulk Data Integration (BDI)
31. Oracle Retail Integration Console (RIC)
32. Oracle Commerce Retail Extension Module (ORXM)
33. Oracle Retail Data Extractor for Merchandising
34. Oracle Retail Clearance Optimization Engine (COE)
35. Oracle Retail Analytic Parameter Calculator for Regular Price Optimization (APC-RPO)
36. Oracle Retail Insights, including Retail Merchandising Insights (previously Retail Merchandising Analytics) and Retail Customer Insights (previously Retail Customer Analytics)
37. Oracle Retail Order Broker