

DataSplice®

Mobile Computing

Add-on Package for Maximo 4.1.1

Installation Guide

Revised: 6/9/2005



DataSplice, LLC
414 E. Oak Street
Fort Collins, CO 80524
Web: <http://www.datasplice.com>
Email: datasplice@datasplice.com
Phone: 800.377.1974
Fax: 970.484.0965

Copyright Information

DataSplice® is a registered trademark. ©2000-2005 DataSplice Corporation. All rights reserved. Other product and company names may be the trademarks of their respective owners.

MAXIMO® software is a registered trademark of MRO Software, Inc. DataSplice is not owned, licensed, or in any way affiliated with MRO Software, Inc. MRO Software, Inc. is not responsible for the content or accuracy of this document or for the content, performance or quality of DataSplice products or services.

Microsoft®, Visual Studio, Windows and the Windows logo are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries/regions.

Other names and products mentioned herein may be the trademarks of their respective owners.

Table of Contents

Introduction.....	4
Purpose.....	4
Version Information.....	4
Installing the DataSplice Add-on Package for Maximo 4.1.1	5
System Requirements.....	6
Supported Operating Systems.....	6
Hardware Requirements.....	6
Additional Required Components.....	6
Installing on Oracle.....	7
Executing the Oracle Scripts.....	8
Installing the Associated DataSplice Views for Oracle.....	10
Installing on SQL Server	11
Executing the SQL Server Scripts	12
Installing the Associated DataSplice Views for SQL Server.....	15

Introduction

Purpose

This guide describes the process of installing the DataSplice add-on package and associated views for the Maximo computerized maintenance management system (CMMS) version 4.1.1. This add-on package provides an efficient method for setting up DataSplice to work effectively with the system with minimal configuration.

The add-on package is installed through a set of scripts particular to the database platform that is being used. The add-on package includes scripts for both Oracle and SQL Server. These scripts build the database views, packages, and stored procedures necessary for DataSplice to correctly interact with the CMMS.

Once the installation scripts have been successfully run, the corresponding set of DataSplice views also needs to be installed. That process is also covered in this guide.

For additional documentation and support resources, please visit <http://support.datasplice.com>.

Version Information

The information in this guide pertains to DataSplice version **2.3.10.0**.

Installing the DataSplice Add-on Package for Maximo 4.1.1

The DataSplice add-on package for Maximo 4.1.1 is installed through a set of scripts. These scripts are particular to the database system being used. The scripts install the database views, packages, and procedures necessary for DataSplice to effectively communicate with the system.

The installation process of the DataSplice add-on package for Maximo 4.1.1 will be examined in the following sections:

- **System Requirements**
- **Installing on Oracle**
- **Installing on SQL Server**

System Requirements

The following information details the system requirements for the DataSplice add-on package for Maximo 4.1.1. This includes a listing of the supported operating systems and the other required components that must also be present on the computer.

Supported Operating Systems

The DataSplice add-on package supports the following operating systems:

- Microsoft Windows NT 4 (Workstation or Server) with service pack 6a
- Microsoft Windows 2000 (Professional, Server, or Advanced Server) with the latest Windows service pack and critical updates available from the Microsoft web site
- Microsoft Windows XP (Home or Professional)
- Microsoft Windows Server 2003 family

Hardware Requirements

The hardware requirements for the DataSplice add-on package are similar to those of the DataSplice Mobile Integration Suite with which the add-on package interacts. The hardware requirements are as follows:

- 500 MHz processor (1 GHz recommended)
- 256 MB RAM (512 MB recommended)
- 200 MB of available hard disk storage (500 MB recommended)

Additional Required Components

The following components must also be installed for the DataSplice add-on package to function correctly:

- DataSplice Mobile Integration Suite
- Microsoft .NET Framework version 1.1 or newer
- Microsoft Data Access Components (MDAC) version 2.6 or newer
- Microsoft XML Core Services (MSXML) version 4.0 or newer
- Microsoft Internet Explorer version 5.01 or newer

Installing on Oracle

To install the DataSplice add-on package for Maximo 4.1.1 on Oracle, first obtain the *ds237_addon_pkg_ora_max411.zip* file. If you do not already have the file, you can access it by logging in to your customer downloads page on <http://www.datasplice.com>. On your customer downloads page, this file will be listed with the title *DataSplice Enterprise Add-On Pkg for Maximo 4.1.1 on Oracle (Updated 8/18/2004)*.

Once you have obtained the file, unzip it to reveal two more *zip* files:

- *DS_ORA_Max411_Scripts.zip* – This file contains the Oracle scripts.
- *ds237_ora_max411_views.zip* – This file contains the associated DataSplice views for Oracle.

The use of these two *zip* files will be examined in detail in their corresponding installation sections. The process of installing the DataSplice add-on package for Maximo 4.1.1 on Oracle will be examined in the following sections:

- **Executing the Oracle Scripts**
- **Installing the Associated DataSplice Views for Oracle**

Executing the Oracle Scripts

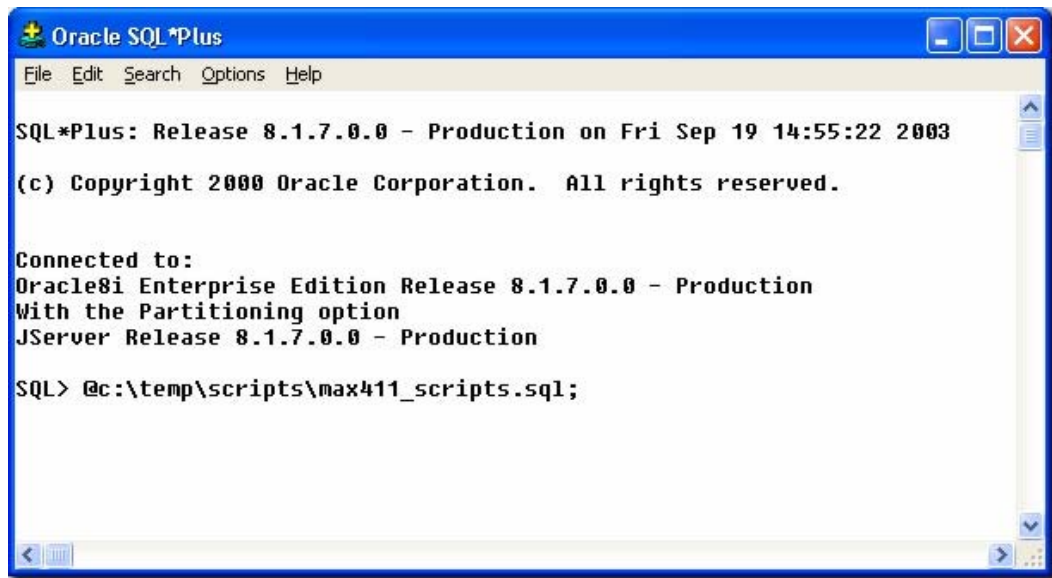
Executing the Oracle scripts builds the necessary database views, packages, and procedures. Before you can begin to execute the Oracle scripts, complete the following steps:

- Unzip the *DS_ORA_Max411_Scripts.zip* file to a specific location, such as *C:\temp\scripts*.
- Log in to Oracle SQL Plus as the CMMS schema owner. This is usually *MAXIMO*.

Executing the Scripts in a Batch Process

You can execute the Oracle scripts in a batch process by using the following steps:

- Execute the *max411_scripts.sql* PL/SQL script:



```
Oracle SQL*Plus
File Edit Search Options Help
SQL*Plus: Release 8.1.7.0.0 - Production on Fri Sep 19 14:55:22 2003
(c) Copyright 2000 Oracle Corporation. All rights reserved.

Connected to:
Oracle8i Enterprise Edition Release 8.1.7.0.0 - Production
With the Partitioning option
JServer Release 8.1.7.0.0 - Production

SQL> @c:\temp\scripts\max411_scripts.sql;
```

- Executing the *max411_scripts.sql* script file in turn executes the following list of scripts in the order listed:
 1. *dsutility.plsql*
 2. *equipment.plsql*
 3. *inventory.plsql*
 4. *workorder1.plsql*
 5. *workorder2.plsql*
 6. *workplans.plsql*
 7. *tooltrans.plsql*
 8. *dsusers.plsql* – optional (see below)

Executing the Scripts Individually

If necessary, the scripts can be executed individually. The only condition is that the *dsutility.plsql* script has been successfully compiled into the database, and that *workorder2.plsql* follows *workorder1.plsql*.

To execute a script individually, enter the following commands in Oracle SQL Plus:

```
SQL> connect {schema_owner}/{schema_owner_password}@{oracle_tns};  
SQL> start {directory_path}\dsutility.plsql;
```

Where *{directory_path}* is the actual directory path to the *dsutility.plsql* file, such as *C:\temp\scripts*. Repeat the execution process for the remaining scripts.

User DB Connection Setup

If you wish to use the **User DB Connection** option to connect to the database with the credentials of the user that logged in to the DataSplice Remote Client rather than the user set up in the connection profile in the Administration Client, you can grant the *DS_USER* role to the desired set of CMMS users. For more information about the **User DB Connection** setting, please see the **Connection Profiles Tab** section of the **DataSplice Administration Client User Manual**.

After the *dsusers.plsql* script has successfully run, you can grant the *DS_USER* role to the desired set of CMMS users. This is completely optional, and is only necessary if you intend to use the **User DB Connection** option for the database connection profile in the DataSplice Administration Client.

Example:

```
SQL> GRANT DS_USER to CMMS_USER1;
```

See the *dsusers.plsql* script for an example SQL query for generating a script file of **GRANT** statements using the **SPOOL** option.

Note: If the schema owner is not *MAXIMO*, the *dsusers.plsql* script will need to be modified to use the correct schema owner prefix.

Installing the Associated DataSplice Views for Oracle

The associated DataSplice views are included as part of the add-on package. This section explains the process of installing these views:

- Ensure that the DataSplice Server is not currently running. If it is running, shut it down.
- Unzip the *ds237_ora_max411_views.zip* file to reveal a list of *xml* files. Each of these *xml* files corresponds to a particular DataSplice view.
- Copy all of the *xml* files.
- Browse to the *Views* subdirectory of the DataSplice installation path. By default, this is *C:\Program Files\DataSplice\Views*.
- Paste all of the *xml* files into this folder.

The appropriate DataSplice views have now been installed. The next time the DataSplice Server is launched, it will recognize these newly-installed views.

Installing on SQL Server

To install the DataSplice add-on package for Maximo 4.1.1 on SQL Server, first obtain the *ds237_addon_pkg_ss_max411.zip* file. If you do not already have the file, you can access it by logging in to your customer downloads page on <http://www.datasplice.com>. On your customer downloads page, this file will be listed with the title *DataSplice Enterprise Add-On Pkg for Maximo 4.1.1 on SQL Server (Updated 8/18/2004)*.

Once you have obtained the file, unzip it to reveal two more *zip* files:

- *ds_ss_max41_scripts.zip* – This file contains the SQL Server scripts.
- *ds237_ss_max411_views.zip* – This file contains the associated DataSplice views for SQL Server.

The use of these two *zip* files will be examined in detail in their corresponding installation sections. The process of installing the DataSplice add-on package for Maximo 4.1.1 on SQL Server will be examined in the following sections:

- **Executing the SQL Server Scripts**
- **Installing the Associated DataSplice Views for SQL Server**

Executing the SQL Server Scripts

Executing the SQL Server scripts builds the necessary database views, packages, and procedures. Before you can begin to execute the SQL Server scripts, complete the following steps:

- Unzip the *ds_ss_max41_scripts.zip* file to a specific location, such as *C:\temp\scripts*.
- Log in to the SQL Query Analyzer as the database owner or system administrator.

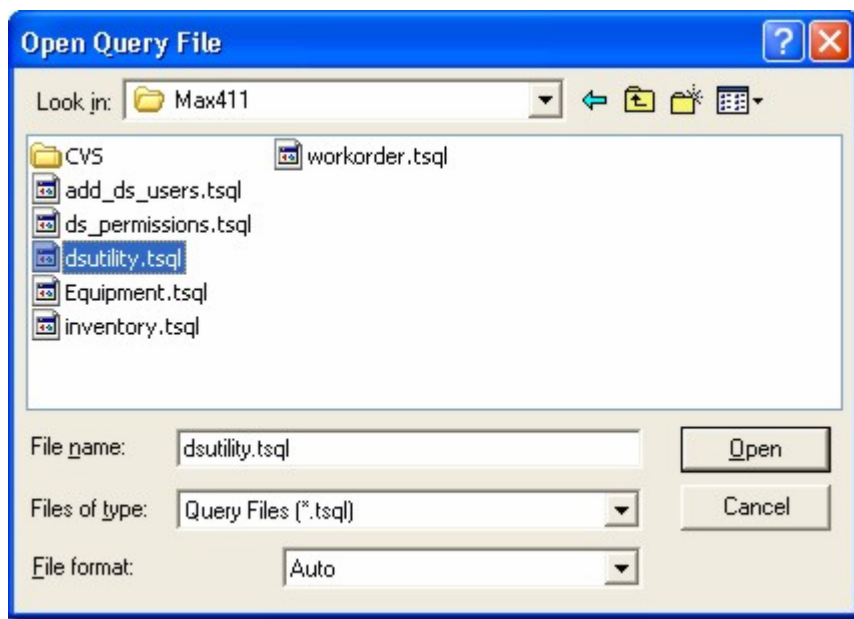
Executing the Scripts Individually


The SQL Server script files should be executed in the following order:

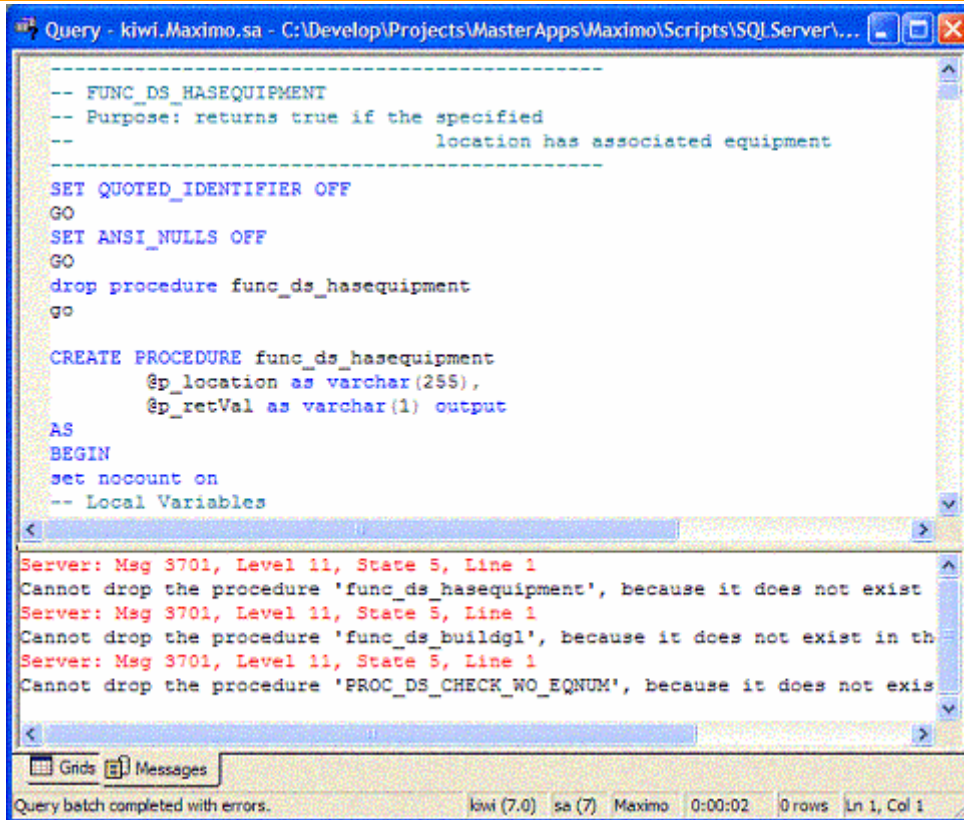
1. *dsutility.tsq*
2. *equipment.tsq*
3. *inventory.tsq*
4. *workorder.tsq*
5. *workplans.tsq*
6. *tooltrans.tsq*
7. *ds_permissions.tsq* – optional (see below)
8. *add_ds_users.tsq* – optional (see below)

To execute a SQL Server script:

- Open the script file:



- Click the **Run** button  to execute the script. The first time the scripts are executed, it is normal to experience the “Can Not Drop” object error.



```

Query - kiwi.Maximo.sa - C:\Develop\Projects\MasterApps\Maximo\Scripts\SQL Server\...
-----
-- FUNC_DS_HASEQUIPMENT
-- Purpose: returns true if the specified
--                                     location has associated equipment
-----

SET QUOTED_IDENTIFIER OFF
GO
SET ANSI_NULLS OFF
GO
drop procedure func_ds_hasequipment
go

CREATE PROCEDURE func_ds_hasequipment
    @p_location as varchar(255),
    @p_retVal as varchar(1) output
AS
BEGIN
set nocount on
-- Local Variables

```

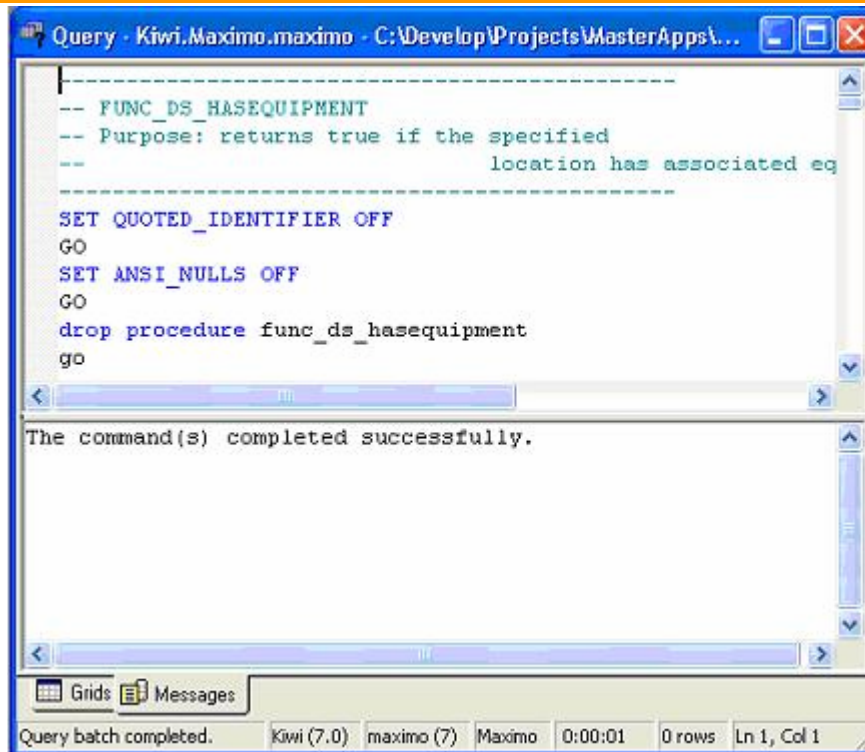
```

Server: Msg 3701, Level 11, State 5, Line 1
Cannot drop the procedure 'func_ds_hasequipment', because it does not exist
Server: Msg 3701, Level 11, State 5, Line 1
Cannot drop the procedure 'func_ds_buildgl', because it does not exist in th
Server: Msg 3701, Level 11, State 5, Line 1
Cannot drop the procedure 'PROC_DS_CHECK_WO_EQNUM', because it does not exist

```

Query batch completed with errors. kiwi (7.0) sa (7) Maximo 0:00:02 0 rows Ln 1, Col 1

- These errors occur because the scripts have been set up to drop objects before they are recreated. Since it is the first time running the scripts, there are no objects to initially drop. The scripts will run successfully the first time, even though you may receive this error. If you choose to run the scripts again, which is not required, it should complete without any errors:



```
Query - Kiwi.Maximo.maximo - C:\Develop\Projects\MasterApps\...
-----
-- FUNC_DS_HASEQUIPMENT
-- Purpose: returns true if the specified
--                               location has associated eq
-----
SET QUOTED_IDENTIFIER OFF
GO
SET ANSI_NULLS OFF
GO
drop procedure func_ds_hasequipment
go

The command(s) completed successfully.
```

Query batch completed. Kiwi (7.0) maximo (7) Maximo 0:00:01 0 rows Ln 1, Col 1

- Repeat the execution process for the remaining scripts.

User DB Connection Setup

The last two scripts, *ds_permissions.tsq* and *add_ds_users.tsq*, are optional. They are only necessary if you intend to use the **User DB Connection** option for the database connection profile in the DataSplice Administration Client. This option passes the credentials of the user that logs in to the DataSplice Remote Client to the database, rather than the credentials specified for the connection profile in the Administration Client. For more information about the **User DB Connection** setting, please see the **Connection Profiles Tab** section of the **DataSplice Administration Client User Manual**.

Installing the Associated DataSplice Views for SQL Server

The associated DataSplice views are included as part of the add-on package. This section explains the process of installing these views:

- Ensure that the DataSplice Server is not running. If it is running, shut it down.
- Unzip the *ds_237_ss_max411_views.zip* file to reveal a list of *xml* files. Each of these *xml* files corresponds to a particular DataSplice view.
- Copy all of the *xml* files.
- Browse to the *Views* subdirectory of the DataSplice installation path. By default, this is *C:\Program Files\DataSplice\Views*.
- Paste all of the *xml* files into this folder.

The appropriate DataSplice views have now been installed. The next time the DataSplice Server is launched, it will recognize these newly-installed views.