Appendix: StateDMI Installation and Configuration Version 03.09.01, 2010-02-15

1. Overview

This appendix describes how to install StateDMI in the CDSS (Colorado's Decision Support Systems) environment. CDSS consists of the HydroBase database, modeling, and data viewing/editing software. StateDMI can be used within this system to process data from the HydroBase database, CDSS model files, and other files.

2. Installing StateDMI as Part of CDSS

Standard locations of StateDMI software files are as follows. Files are normally installed on Windows on the C: drive but can be installed in a shared location on a server.

\CDSS\StateDMI-Version Top-level install directory.

> Software directory for StateDMI.bat file bin

> > and Java JAR files.

batik*.jar Scalable Vector Graphics (SVG) output

packages.

Used for encryption/security. Blowfish*.jar

cdss.domain*.jar CDSS components.

HydroBaseDMI.jar* State of Colorado HydroBase database

interface package.

Plotting package. jcommon.jar, jfreechart.jar jsr173_1.0_api.jar, XML support.

libXMLJava.jar

jython.jar Jython support.

sqljdbc4.jar Microsoft SQL Server packages. Riverside Technology, inc. supporting RTi_Common*.jar

packages.

SatmonSysDMI*.jar State of Colorado Satellite Monitoring

System package.

shellcon.exe Executable program used to read from the

> Windows registry (e.g., to determine the default web browser and list available ODBC data source names). - PHASING

OUT.

StateDMI.exe Executable program to run StateDMI using

the JRE software.

Configuration file for StateDMI.exe StateDMI.l4j.ini

launcher.

StateDMI program components. StateDMI*.jar

State of Colorado's StateMod and StateCU StateMod*.jar

model packages.

TSCommandProcessor*.jar Time series command processor package. jre*

doc\StateDMI\UserManual\ Main documentation directory for

StateDMI.

StateDMI.pdf StateDMI documentation as PDF.

Java Runtime Environment (JRE) used by

StateDMI.

logs\ Directory for StateDMI log files (should be

writable).

system\ Directory for system files.

CDSS.cfg CDSS configuration file for HydroBase

database connection.

Data units file.

StateDMI.cfg Configuration file to modify StateDMI

defaults (under development).

3. Installing StateDMI

Use the following instructions to install StateDMI using the *StateDMI_CDSS_Version_Setup.exe* installer program, for example if StateDMI software was downloaded from the CDSS web site (http://cdss.state.co.us):

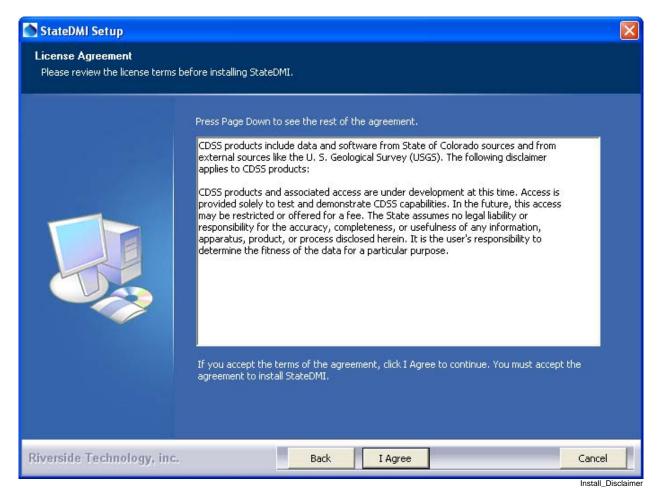
1. Run the *StateDMI_CDSS_Version_Setup.exe* file by selecting from Windows Explorer, the *Start...Run...* menu, or from a command shell. The setup filename will include a version number (e.g., *StateDMI_CDSS_03.09.01_Setup.exe*).

You must be logged into the computer using an account with administrator privileges. If you have administrative privileges, the following welcome will be displayed, and the installation can continue:



Install_Welcome

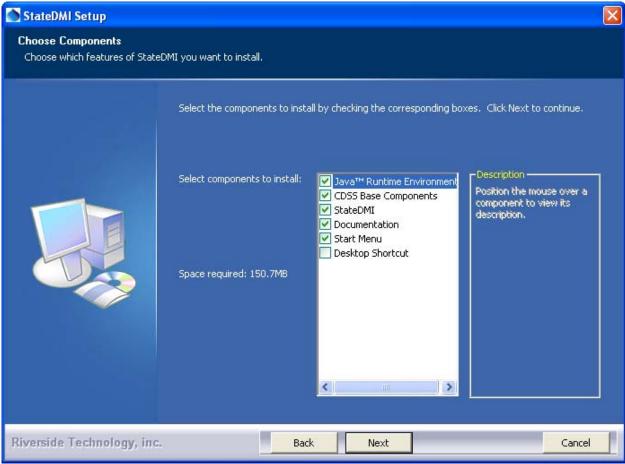
Press *Next* to continue with the installation.



claimer must he

StateDMI is distributed with CDSS with no license restrictions. However the disclaimer must be acknowledged. Press *I Agree* to continue with the installation.

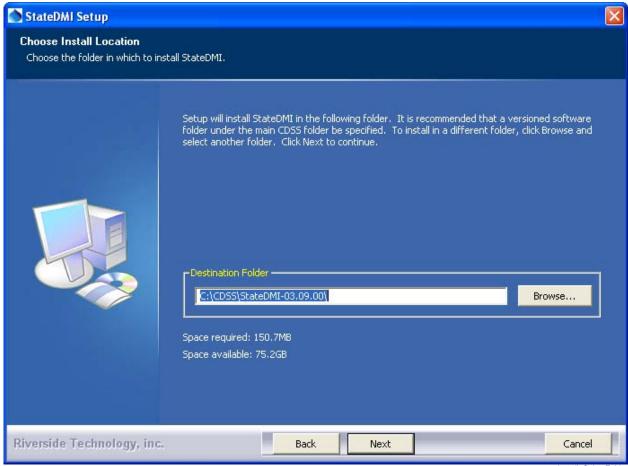
2. Several components can be selected for the install as shown in the following dialog. Position the mouse over a component to see its description.



Install_SelectComponents

Select the components to install and press **Next**.

3. The following dialog is then shown and is used to select the installation location for StateDMI. Multiple versions of StateDMI can be installed and there are no dependencies between the versions. It is recommenced that the default install location shown is used.

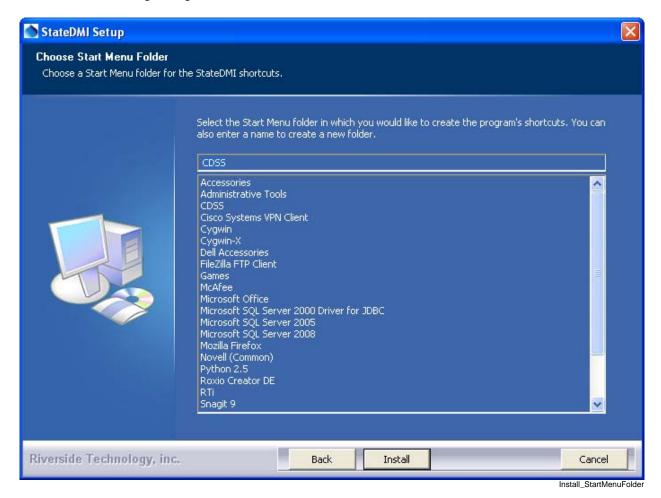


Install_SelectFolde

After selecting the install location, press Next.

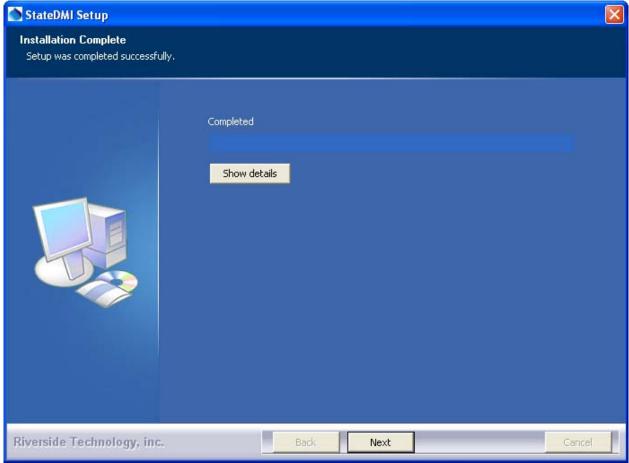
Note that this location will be saved as a Windows registry setting (\(\textit{HKEY_LOCAL_MACHINE}\)\(Software\)\(State of Colorado\)\(StateDMI-Version\)\(Path\)\) to allow future updates to check for and default to the same install location, and to allow the standard software uninstall procedure to work correctly.

4. The following dialog will be shown to select the menu for the software:



After selecting the folder, press *Install*.

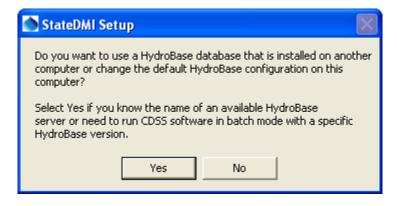
5. The following dialog will show the progress of the installation:



Install_Complete

Press **Show details** to see the files that were installed or press **Next** to continue.

6. If the CDSS Base Components were selected for install (the default), the following dialog will be displayed:

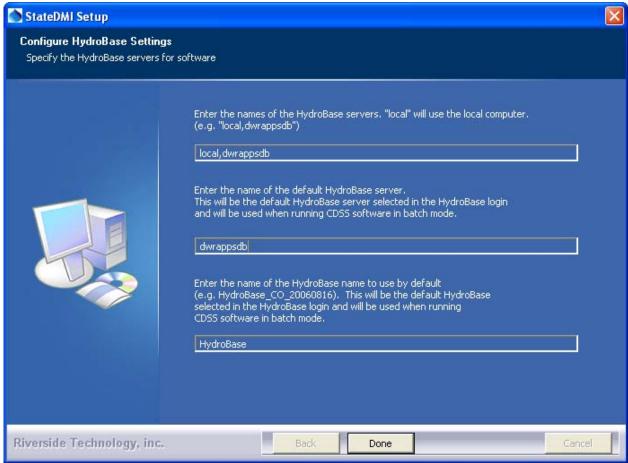


Install_HydroBaseQuestion

StateDMI and other CDSS software can utilize HydroBase running on the local computer as well as other computers. Press **Yes** if HydroBase has been installed on another computer in the network

environment and may be used by the software (then continue to the next step). Otherwise, press **No** (skip to step 8).

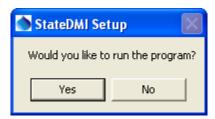
7. The following dialog allows additional HydroBase servers to be specified for use by CDSS software (the example below configures CDSS software to list the *dwrappsdb* HydroBase server in choices and defaults to HydroBase on the local computer):



Install_HydroBaseConfiguration

After entering the name of a HydroBase server and the default server to use, press **Done**.

8. The following dialog will then be shown asking whether the StateDMI software should be run:



Install_RunStateDMIQuestion

Press **Yes** to run the software or **No** to exit the installation procedure.

3.1 StateDMI Configuration Files

StateDMI requires minimal configuration after installation. This section describes StateDMI configuration files that can be customized for a system.

3.1.1 Data Units File

The <code>system\DATAUNIT</code> file under the main installation directory contains data unit information that defines conversions and output precision. In most cases the default file can be used but additional units may need to be added for a user's needs (in this case please notify the developers so the units can be added to the default file distributed with installations). Currently, the data units file is the only source for units information – in the future units may be determined from the various input sources.

3.1.2 CDSS Configuration File

By default, StateDMI will automatically look for HydroBase databases on the current (local) machine and the State servers. State server databases are typically only accessible to State of Colorado computers. If SQL Server HydroBase versions have been installed on a different machine, the \CDSS\StateDMI-Version\system\CDSS.cfg file can be used to indicate the database servers. An example of the configuration file is as follows:

```
[HydroBase]

ServerNames="ServerName,local"

DefaultServerName="ServerName"

DefaultDatabaseName="HydroBase_CO_20080730"
```

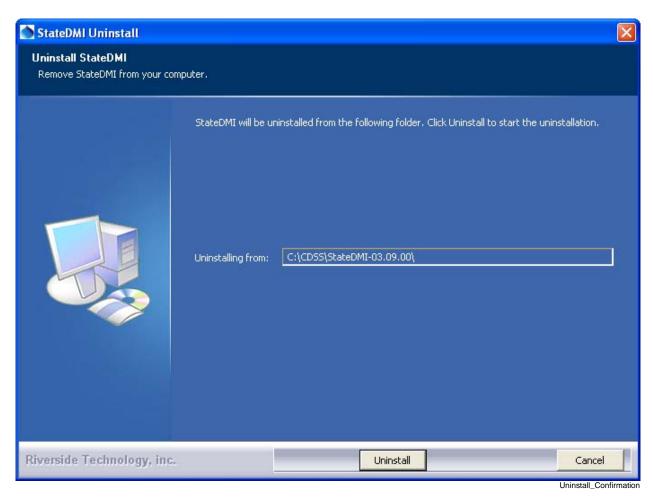
The CDSS configuration properties are described in the following table:

CDSS HydroBase Database Configuration Properties

Property	Description	Default
ServerNames	A comma-separated list of server names to list in the	The state server
	HydroBase login dialog.	is listed.
Default ServerName	The default HydroBase server name to use. This allows	greenmtn.
	the HydroBase login dialog to preselect a default that	state.co.us
	applies to most users in the system.	
Default DatabaseName	The default HydroBase database name to use. This allows	
	the HydroBase login dialog to preselect a default that	
	applies to most users in the system.	
Database	Reserved for internal use.	
Engine		
DatabaseName	The database name to use for the initial connection. This	
	overrides the default server.	
Database Server	The server name to use for the initial connection. This	
	overrides the default server.	
SystemLogin	Reserved for internal use.	
SystemPassword	Reserved for internal use.	
UserLogin	Reserved for internal use.	_

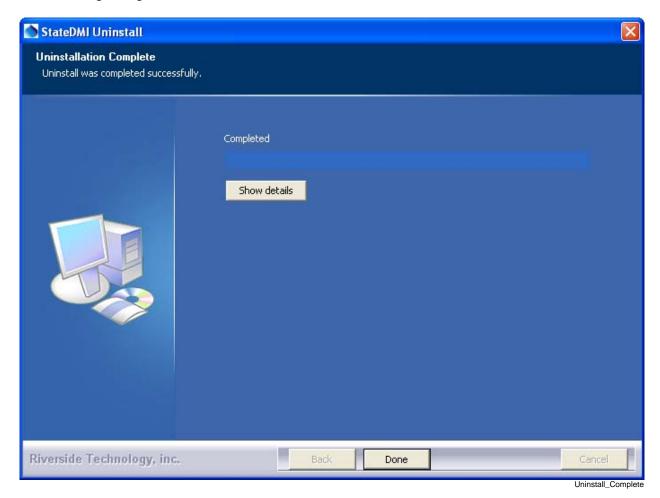
4. Uninstalling StateDMI Software

To uninstall StateDMI software, select *CDSS...Uninstall...StateDMI-Version* from the *Start* menu and confirm the uninstall. User data will remain installed.



Press *Uninstall* to uninstall the software.

The following dialog shows the status of the uninstall.



Press **Show details** to see the list of files that were removed. Press **Done** to exit the uninstall.