

Administrator's Guide Hach WIMS™ Multi-User with MS SQL Server Database Support

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1.1 Introduction

The Hach Water Information Management Solution (with DB Support) (referred to as WIMS[™] in this manual) is a data management system specifically designed for water and wastewater facilities. It allows you to track, report, graph, and analyze facility data including SCADA, lab, and operator entered data. The Hach WIMS[™] system consists of a rich front-end client running on each user's PC with a backend Microsoft SQL database. This manual is intended to assist the administrator install, configure, and maintain the WIMS[™] system.

Hach WIMS Multi-User with MS SQL Database support has the following base features:

- Unlimited Variables and Facility Database Size
- Support for MS SQL Server 2005, 2008
- Scheduled Output of reports and graphs (GNR Server)

Allows you to purchase:

- Up to 20 Concurrent Users
- Up to 20 Facility Databases
- Unlimited number of interfaces

Knowledge Base

Our Knowledge base website is used to help our users via various articles and information. To access our knowledge base, please visit. <u>http://www.opssys.com/instantkb/</u> From here you can use the browse or search functions to find information for the various components of the Hach WIMS System. Throughout this guide, links to Knowledge Base articles maybe presented to the user. We encourage you to visit our knowledge base for additional support.

1.2 Hach WIMS[™] System Requirements

Hach WIMS[™] Client and Components

Operating system:

- Microsoft Windows 2000 Service Pack 4
- Microsoft Windows XP Service Pack 2 or later
- Microsoft Vista RMT
- Microsoft Windows 2003 Server Service Pack 1
- Microsoft Windows 2003R2 Server Service Pack 2
- Microsoft Windows 2008
- Microsoft Windows 7
- See <u>http://www.opssys.com/instantkb/Article.aspx?id=12215</u> for a complete list.

Data access:

• Microsoft SQL 2005, MS SQL 2008

Hardware (Minimum requirement for good performance):

- 1-Way Architecture, choice of:
 - o Intel P3, 500 Mhz or better
 - AMD Athlon, 500 Mhz or better
- System RAM
 - o 256 (512 on XP) MB
- Hard Drive:
 - 10 GB, 5400 RPM
- Interfaces: T10 LAN, Video card, DVD-ROM

NOTE: Hach WIMS[™] interfaces, Calc Engine, and GNR Server are designed to run as Windows (NT) services.

Hach WIMS[™] DATABASE NETWORK BANDWITH SPECS

Hach WIMSTM is based upon a true client-server architecture. The client software has a large footprint and requires a speedy connection to the database server.

It is very hard to precisely state the minimum network bandwidth requirements for Hach WIMSTM. It was developed to work efficiently on a 10 Megabit networks. Yet, depending on your current network bandwidth utilization, even 10 Megabit may not be enough.

We do not recommend deploying Hach WIMS[™] onto T1 bandwidth rated networks. If you are bound by such network hardware, please consider running the Hach WIMS[™] client on an application server (such as Windows Terminal Server, or Citrix).

1.3 System Overview

The Hach WIMS[™] data resides in a MSSQL 2005 database typically provided by the client. Note: WIMS also supports Oracle and the MS SQL 2005 Express database. The WIMS[™] database stores data from a variety of sources including LIMS, SCADA, and manually entered. It then performs user defined calculations and stores the results in the database. As this is a rich and robust program, there are some technical terms that are important to understand.

Definitions:

Client/server:	An architecture in which the user's PC (the client) is the requesting machine and the server is the supplying machine, both of which are connected via a local area network (LAN) or wide area network (WAN). In this environment, servers are used to store and share data with the client PCs. The important concept of client/server is that both client and server each take on some of the application processing.
Client software:	It is the Hach WIMS TM executable (Hach_ WIMS.exe) that resides in a user's computer and is used to interact with the database. The client processes the user interface and can perform some or all of the application processing.
Database Support:	Sometimes referred to as DB Support, allows Hach WIMS to utilize an enterprise Database Management System such as MS SQL Server (Enterprise, Standard, or Workgroup edition) or Oracle. Database Support is an add-on and is part of the software license.

Concurrent Users:	Multiple users may log into the WIMS ^{TM TM} system at the same time. These users are concurrent users because they are accessing the system concurrently.
Server software:	Software that resides in a server and provides services to multiple users on the network. A database server maintains the databases and processes requests from the client to extract data from or to update the database. An application server provides additional business processing for the clients.
NT Services:	Applications that run in the background, that do not require login or have no user interface. Typically these are run on the server.
MSSQL 2005:	MSSQL 2005 is the database management system typically provided by the client.
SMTP Server:	Server that is used to send email. (Simple Mail Transfer Protocol)
Server\computer name:	The unique ID of a computer on a network. The computer name can be found in System Properties on the Computer Name tab.

1.3.1 Installation Preparation

Hach WIMSTM Mulit-User is designed run on a multiuser network. Below is a description of the system architecture.

- a) Database Management Software (MS SQL) resides on one machine.
- b) Client software is installed on any number of machines. Including terminal service machines.
- c) Server software (ADOCALC, GNR Server, etc...) can split onto multiple computers, installed on an App server, or on the DB Server itself.



Below are some additional definitions of the items and options for Hach WIMS[™]:

Server Setup: Utility used to create WIMS[™] tables, stored procedures, upload clients, restore database backups, etc...

ADO CALC: The WIMS[™] Calc engine is an NT Service that monitors the WIMS[™] databases and calculates data as required so it is available for reports, graphs, etc... ADO Calc should be places on a powerful PC that is close to the Server. **NOTE**: ADO Calc can run on the server, which will reduce network traffic and improve system performance.

DBA Helper: A Hach WIMS[™] NT Service that performs backups of the database.

Live Update: A Hach WIMSTM NT Service that checks the Hach WIMSTM website for updates of available for install by the user.

Email Gateway: Connects to your SMTP mail server and relays the emails generated by the Hach WIMSTM Client (i.e. you choose to output a report or graph to email) or emails generated by the GNR Server (i.e. reports or graphs that are output on a scheduled basis)

Scheduler: Used to schedule output of report or graphs, database calculations, or database backups.

GNR Server:	Receives requests from the scheduler to output reports and graphs, generates the output, sends the output to a printer, a file, or to email (i.e. it sends it to the email gateway)
IABroker:	Facilitates the interaction of 3^{rd} party software's interaction with the WIMS^TM System. (Such as IFix)

1.4 New Installation

Hach WIMSTM installation uses the WIMSTM Platform Installer. This Software assists you while installing the WIMSTM Software. You may use this section to install any component to the WIMS System. The process is the same weather you are installing one component or all the components.

NOTE: If you are upgrading from a previous version (OPS SQL), please refer to Upgrading from 6.x.x section for installation. Please make a backup of your old system!

- 1. Close all programs that are currently running.
- 2. Place the Hach WIMSTM DVD into your DVD drive and the Hach WIMS Platform Installer Welcome will be displayed. If the Welcome screen does not appear, double click on d:\Launcher\Launcher.hta where d: is your dvd drive.



3. Click Launch Installation option from the Hach WIMS[™] Platform Installer Welcome.

NOTE: You may see a Prerequisites Wizard if any prerequisites are not installed. Please install these Prerequisites using the Prerequisites Wizard to continue installations. (.Net Framework is a common missing prerequisite.)

4. The Platform Installer will ask you to review and agree to the License Agreement. Check the Box if you agree and click **Next**.



5. The Platform Installer should launch. Enter your Serial number and Browse to your License File (.License2008). Click the Next button. (Your license file should be on the CD or it may be emailed to you.)

🚰 Platform Installer - Serial Number Entry (v.1.0.0.457)	
Hach WIMS™	HACH
Serial Number	
Enter your serial number or paste it from the clipboard to continue:	
	- Paste
License File	
Path to license file:	
	Browse
License Info Cancel < Pre	vious Next >

6. The Platform Installer will search for Hach WIMS[™] MSI Locations. You may need to browse to the MSI Location using the Browse button. When a location is found, a popup will inform you. Click **Next**. If you are installing from the DVD you can just click **Next**.

Platform Installer - MSI Location (v.1.0.0.457)	
Hach WIMS™	HACH
OPS SQL MSI Locations Please specify a folder containing the MSI file(s) you with to install, or click "Br	owse"
D:\	Browse
The bootstrapper is searching for MSI packages. Click "Stop" at any time to car Search	ncel the search!
Search USB drives	
Search Network drives	
Stop searching after first result MSI install location found	1 MSI Locations found
— Hach WIMS Express Edition ————	
License Info Cancel < F	Previous Next >

- 7. Next you are asked which components you wish to install. When you have selected the components you wish to install, click the **Next** button.
 - a. Server The Server components maybe split between multiple machines. Each Machine must have a connection to the machine hosting your database. Select the Components for this machine.
 - b. Client If you are installing just the client then you will need to make sure that only the client components are selected and **none** of the server components.

Platform Installer - Component Selection (v.1.0.0.457)	
Hach WIMS™	HACH
The following components are available for installation based on your I Components in red are in an error state and cannot be installed.	icense and provided location.
Client Components Client SQL Server 2005 Native Client Pocket WIMS Hach WIMS IABroker Service	
Server Components	
Hach WIMS Express Edition License Info Cancel	< Previous Next >

8. Next you will choose your default installation directory and your Server Location. The directory you choose will be the default and each component will be installed with this directory in mind.

🚰 Platform Installer - Installation Directory and Server Location (v.1.0.0.555) 🛛 💽 🔀
Hach WIMS [™]
Default component install location Choose the default base installation directory for the selected components. All selected features will be installed under this directory. You can change this location per component during actual component install
C:\HachWIMS Browse
Hach WIMS Standard License Info Cancel Kext >
You can get help by pressing F1 or the question mark!

9. The Platform Installer will list the Components that you selected and prepare them to be installed. If everything looks right, click the Begin button. Each Component will have its own Installation wizard. Complete each wizard to continue with installation. Please see the Component Installation section for help with each wizard. Once each component has finished, press the finished button. Congratulations! Hach WIMSTM is now installed.

(F	Platform Installer - Installation Status	(v.1.0.0.457)	
	Hach WIMS™		HACH
	Click 'Begin' to start insta	allation of selected fe	atures
	Feature	Status	▲
	SQL Server 2005 Native Client	Pending	
	OPS Database Management system	Pending	
	SQL Server 2005 Command Line Query Utils	Pending	
	Hach WIMS GIVE Service	Pending	
	Hach WIMS Email Gateway Service	Pending	×
_	— Hach WIMS Express Edition	Cancel < P	revious Begin

1.5 Upgrading from a 6.x.x (OPS SQL)

If you have a version earlier than 7.0.0, you will need to uninstall it. During the installation process, the Platform Installer will attempt to detect whether or not you have an earlier version. The OPS SQL Client will need to be uninstalled manual. During this upgrade process, your tutorial databases may be deleted (Rocky Creek and Sandy Beach). Please back them up if you wish to save their content. All the old OPS SQL components will be upgraded or uninstalled by the Hach WIMSTM Installer as needed. During the installation of Hach WIMS[™], you will run into a few exceptions that you would not find in a normal installation.

NOTE: If you are upgrading you must backup your OPSSQL system.

1.5.1 Uninstalling OPS SQL Client

You will need to manually uninstall the OPS SQL Client via Add/Remove Programs. NOTE: Please backup your OPSSQL system before uninstalling.

may

654.00MB

654.00MB

69.07MB

20.51MB

2.48MB

7.99MB

7.99MB

~

look

of

- Control Panel Edit View Favorites Tools Help 🕒 Back 🔻 🐑 👻 🏂 🔎 Search 🔊 Folders 🗰 Scroll down to OPS Address 🔂 Control Panel 2. 🗸 🄁 Go SQL. Select it. Press P Ġ, Z --Control Panel Change/Remove Button. Date and Time Accessibility Add Hardware Options Administrative Tools Automatic Updates Display Add o Switch to Category View (Your Add/Remove P ٣ đ 1 1 Ú. Program ۲ See Also older Options Fonts Game Internet Keyboard Mail Mouse Differently depending on 🍪 Windows Update Ontions Help and Support version vour ٩ ۹Ì) 9 Windows.) Power Options Printers and Faxes Network Network Setup Wizard Phone and Modem ... Regional and Scanners and Cameras Connection Language ۲ P 🌠 🐻 Add or Remove Programs Scheduled Tasks Security Center F Currently installed programs: Show updates Sort by: Name Change or Remove Hicrosoft .NET Framework 2.0 Service Pack 1 Size 185.00MB æ Programs 🙀 Microsoft Compression Client Pack 1.0 for Windows XF Windows Firewall Wir S Microsoft Office Access 2007 Size 654.00MB Microsoft Office Standard 2007 Size 654.00MB Add New Programs R Microsoft Office Ultimate 2007 Size Standard Contract And Annual 2007 Size C 📳 Microsoft SQL Server Desktop Engine (OPSSQL) Size Add/Remove 🙀 Microsoft User-Mode Driver Framework Feature Pack 1.0 Windows omponents 🚊 OPS SQL Express Edition Size 463.00ME Used occasionally Change/Remove Set Program Access and Defaults VMware Tools Size 👸 Windows Installer 3.1 (KB893803) Windows Internet Explorer 7 Size 🕞 Windows Media Format 11 runtime Size • Windows Media Player 11 Size
- 1. Open Add/Remove Programs Via Control Panel.

You will be presented with the OPS SQL Installer Removal. Press **Yes** when you are asked if you want to remove OPS SQL.



4. OPS SQL will begin uninstalling. You may be asked if you wish to remove a Shared file. Select Remove None



5. You may also be warned about files that cannot be removed. Press



OK

6. You may also receive the following warning. Press



7. After multiple messages in steps 5 and 6, the un-installation will complete.

1.5.2 Hach WIMS[™] Installation

The installation of Hach WIMS[™] will proceed normally except a few exceptions listed here.

- 1. Close all programs that are currently running.
- 2. Place the Hach WIMS[™] DVD into your DVD drive and the Hach WIMS Platform Installer Welcome will be displayed. If the Welcome screen does not appear, double click on d:\Launcher\Launcher.hta where d: is your dvd drive.



3. Click Launch Installation option from the Hach WIMS[™] Platform Installer Welcome.

NOTE: You may see a Prerequisites Wizard if any prerequisites are not installed. Please install these Prerequisites using the Prerequisites Wizard to continue installations. (.Net Framework is a common missing prerequisite.)

Exception 1: Old Versions Cleanup

You will be presented with the Older Product Versions Installed screen. This screen will list all the older products you have install and will inform you of what will be done with these older versions.

🝘 Platform Installer - Old ve	ersions cleanup (v.1.0.0.457)	
Hach WIMS		HACH
Older product versions installed – 5 old components were found or remove/upgrade them and clic	on this computer. Please review the actions t k 'Next'	hat will be taken to Re-check
Product	Action	Path
OPSSQL_AdoCalc OPSSQL_DBA_Helper OPSSQL_GNR_Server OPSSQL_LiveUpdate OPSSQL_WatchDog	Service will be removed & files backed up Service will be removed & files backed up	c:\OPSSQL\AdoCalc\/ c:\OPSSQL\DbaHelpe c:\OPSSQL\opssqlgnrs c:\OPSSQL\LiveUpdat c:\OPSSQL\WatchDog
<	ш	>
— Hach WIMS Expres	ss Edition	
License Info	Cancel	< Previous Next >

Click Next. From here continue installing like normal.

4. The Platform Installer will ask you to review and agree to the License Agreement. Check the Box if you agree and click **Next**.



 The Platform Installer should launch. Enter your Serial number and Browse to your License File (.License2008). Click the Next button. (Your license file should be on the WIMS DVD Case or it may be emailed to you.)

Platform Installer - Serial Number Entry (v.1.0.0.457) Hach WIMS [™]	HACH
Serial Number Enter your serial number or paste it from the clipboard to continue:	Paste
Ucense File Path to license file:	Browse
License Info Cancel < Previous	s Next >

6. The Platform Installer will search for Hach WIMS[™] MSI Locations. You may need to browse to the MSI Location using the Browse button. When a location is found, a popup will inform you. Click Next. If you are installing from the CD you can just click **Next**.

Platform Installer - MSI Location (v.1.0.0.457)
Hach WIMS [™] (HACH)*
OPS SQL MSI Locations Please specify a folder containing the MSI file(s) you with to install, or click "Browse"
D:\ Browse
The bootstrapper is searching for MSI packages. Click "Stop" at any time to cancel the search! Search
Search USB drives
Search Network drives
Stop searching after first result
MSI install location found 1 MSI Locations found
— Hach WIMS Express Edition ————————————————————————————————————
License Info Cancel < Previous Next >

- 7. Next you are asked which components you wish to install. When you have selected the components you wish to install, click the **Next** button.
 - a. Server The Server components maybe split between multiple machines. Each Machine must have a connection to the machine hosting your database. Select the Components for this machine.

b. Client - If you are installing just the client then you will need to make sure that only the client components are selected and **none** of the server components.

🚰 Platform Installer - Component Selection	on (v.1.0.0.457)
Hach WIMS™	HACH
The following components are available for install Components in red are in an error state and canno Component selection	ation based on your license and provided location. to be installed. Component Description
Client Components Hach WIMS Client SQL Server 2005 Native Client Pocket WIMS Hach WIMS IABroker Service	
Server Components	
License Info	Cancel < Previous Next >

Exception 2: Upgrading from MSDE

When selecting which components you'd like to install, if you select server components, you will an additional message window informing you of the upgrade of your old Database.

Platform	n Installer 🛛 🔀
⚠	An OPSSQL MSDE instance was found on this computer. Choosing to install SQL Server 2005 express means the MSDE feature will be upgraded.
	ОК

Click Ok. You will be warned about how long this upgrade may take. The larger your database, the longer it will take to upgrade.

Exception 3: MSSQL 2005 Warning

During the upgrade of MSDE to SQL 2005 you may get a popup window. Click Retry.



8. Next you will choose your default installation directory and your Server Location. The directory you choose will be the default and each component will be installed with this directory in mind.

🗭 Platform Installer - Installation Directory and Server Location (v.1.0.0.555) 🛛 💽 🔀
Hach WIMS™
Default component install location Choose the default base installation directory for the selected components. All selected features will be installed under this directory. You can change this location per component during actual component install
C:\HachWIMS Browse
Hach WIMS Standard
License Info Cancel Cancel Next >
You can get help by pressing F1 or the question mark!

9. The Platform Installer will list the Components that you selected and prepare them to be installed. If everything looks right, click the Begin button. Each Component will have its own Installation wizard. Complete each wizard to continue with installation. Please see the Component Installation section for help with each wizard. Once each component has finished, press the finished button. Congratulations! Hach WIMSTM is now installed.

Platform Installer - Installation Status	(v.1.0.0.457)	_
Hach WIMS™		HACH
Click 'Begin' to start inst	allation of selected f	eatures
Feature	Status	
SQL Server 2005 Native Client OPS Database Management system SQL Server 2005 Command Line Query Utils Hach WIMS GNR Server Hach WIMS Scheduler Service Hach WIMS Email Gateway Service	Pending Pending Pending Pending Pending Pending	
— Hach WIMS Express Edition	Cancel < P	revious Begin

1.6 Hach WIMS[™] Server Setup

The Hach WIMS[™] Server Setup program allows the administrator to create new databases, restore backed up databases, import OPS 32 databases, and perform database upgrades.

1.6.1 Create Hach WIMS Root Tables

The utility needs access to an existing **MS SQL Server**. The first time Server Setup connects to the DBMS, it will prompt for the SQL Server SA username and password and create the WIMS base structures. **Note:** This login information is not stored by any Hach WIMS product once the structures have been created.

1. Run Hach WIMS[™] Server Setup (MSSQL Edition).



2. Click Next at the Welcome Screen:



3. Connect to the Database:



4. If this is the first time you are connecting Server Setup to this DBMS, you will be prompted for the SA username and password. Enter your SA Username and password and click **Next**:

Hach WIMS Server Setup for MicrosoftSQL	X
CREATE OPS MASTER USE	3
Wizard needs to create OPSDBA user. Hach WI communicate with your MSSQL server if this use all its schemas, tables, stored procedures, etc w	MS server and client software are only able to r exists. Wizard software will use OPSDBA to create ithin your database server.
It is important to know that Hach WIMS software what was created by OPSDBA user. This is to pr	will not be able to access any data except for otect other schemas of your MSSQL server.
Please provide Wizard with username and passw privileged to create and administer new users ar WIMS purposes. (sa login credentials are recom	rord of an already existing user. This user has to be Id provide them with sufficient privileges for Hach mended here)
Microsoft SQL Server login credentials	
Username:	\$a
Password:	[•••••]
Wizard will only use the entere information will not be remember	d information to create the OPSDBA user. The red in any way.
<<< BACK	NEXT >>>

Server Setup will create the OPSDBA user and the OPSROOT database in the MS SQL Server DBMS. Server Setup will exit and you are now ready to create WIMS Facility Databases.

1.6.2 Creating New Hach WIMS[™] Facilities

You have two ways of creating WIMS[™] facilities using the Hach WIMS[™] Server Setup program.

- A. Create a new facility
- B. Import an OPS32 database

Both of these processes will require you to specify a unique identifier and a facility name for the new facility. The unique identifier is used to create a database under which all tables, stored procedures, and triggers will be held for the new facility.

Unique Identifier:	This field can only contain letters. No numbers or other special characters. You are limited to a maximum of 8 characters – we recommend you only use 4 characters or less.
Data Source:	The MS SQL Server that will be hosting this database.

Facility Name:You should use your common facility name. If you call your plant Rocky Creek
WWTP – type in Rocky Creek WWTP.

OPTION A: Creating a new facility

You will use the server setup utility to create a new Hach WIMS[™] database. This utility will require you to specify a unique identifier, data source, and a facility name for the new facility.

1. Run Hach WIMS[™] Server Setup.



2. Click Next.



3. Your MSSQL Server Name should already be in place. If it is not, enter it here. Computer Name/Instance example localhost\OPSSQL). Click **Next**.

A Hach WIMS Server Setup for Microsoft SQL : Step 1 out of 5		
DETECT MSSQL SETTINGS		
The wizard will start by detecting the settings of a Microsoft SQL Server. The server has to be running. You are asked to provide the wizard with the name of this server.		
Once you click on NEXT, the wizard will try to connect to the specified Microsoft SQL Server. If it succesfully connects, this means OPS SQL has already been set up on this server. In this case, the wizard take you directly to OPS SQL Server Setup.		
If the wizard cannot connect to the specified database, it means that OPS SQL OPSDBA user schema needs to added to the database. The wizard will attempt to create all needed schemas, tables, etc so that this database is ready for future connections from OPS SQL.		
CONNECT TO MS SQL SERVER : Jocalhost\OPSSQL		
HINT Wizard supports connections to both Microsoft SQL server and server instance		
<<< EXIT NEXT >>>		

4. Enter a Hach WIMS[™] Super Username and Password. The default username is Super, password Super. Click **Next**.

B Hach WIMS Server Setup for MicrosoftSQL : S	itep 2 out of 5	×
Wizard has been alk to connect to the specified MSSQL server. The service is Hach WIMS enabled. To manage Hach WIMS facilities, please login as a Hach WIMS superuser.		
Hach WIMS Username: Hach WIMS Password:	super	
< BACK		NEXT >>>

5. Click on the New Facility Tab to name your database.

B Hach WIMS Server Setup	o for Microsoft SQL	v2.0.0 (Microsoft SQL Server v09.00.3042)
Conr	nected to 'LO	CALHOST\OPSSQL'
- Existing Facilities		
Tutorial - Rocky Cree Tutorial - Sandy Beac	k WWTP th WTP	Unique Identifier:
		Data source:
		Change Name Change Data Source Remove from list
· · ·	Upload Updates	Restore Console Database Upgrade
Server Setup	New Facility	Import Facility Import Security
Facility Name:		
Data Source:		Furgerite
Unique Identifier:		
OPS		
		-

Facility Name: You should use your common facility name. If you call your plant City WWTP – type in City WWTP.

Unique Identifier: A short identifier for the new database. This field will be defaulted when you enter a Facility Name. This field can only contain letters. No numbers or other special characters. You are limited to a maximum of 8 characters – we recommend you only use 4 characters or less.

Data Source: This should match the server you are connecting to.

6. Click **Execute**. The Server Setup will create a new database and display the Success message. If you do not get a success, then your facility may not have been created.

Connected to 'LOCALHOST\OPSSQL'	
Existing Facilities	
Tutorial - Rocky Creek WWTP Tutorial - Sandy Beach WTP Facility Name:	
OPSNF Finalizinal Hach WIMS Server Setup for Microsoft SQL Success! Log saved as : C:\HachWIMS\ServerSetup_MSSQL\log\OPSNF (01_27_2009).log OK New Facility Data Source: [local)\OPSSQL Execute	
Unique Identifier: OPS NF	

7. All new facilities are upgraded to the latest database version during their creation. This means you should be able to login to your new facility immediately.

OPTION B: Importing an OPS 32 database

You will use the server setup utility to import an OPS 32 databases to Hach WIMS[™]. You will need to browse for an OPS32 .mdb database file. We recommended that you repair and compact this database file before you import it into Hach WIMS[™]. Also, make sure that nobody is logged in the .mdb file when you are importing it (make sure the .ldb file does not exist).

- **NOTE**: If you want to import your OPS32 User data into the Hach WIMS[™] system, you will need to import it once while importing one of your facilities. To do this, simply add the user.2k file from your OPS32 installation on the "import security" tab inside system setup.
- 1. Start up Server Setup.



2. The Server Setup Welcome screen will be displayed Click **Next** and you will be prompted for your Server. Your Server Name should be in there. If not yype in your server name/sql instance (example localhost/OPSSQL). Click **Next**.

	Welcome to Hach WIMS Server for Microsoft SQL DBMS v 2.0.0 This wizard will take you step-by-step through th process of setting up Hach WIMS software on your Microsoft SQL server. Please follow the instructions carefully. Should any questions con up, contact OPS Systems at 1:800-0PS-0005 o email our technical support staff at support@opssys.com	rver Setup for Microsoft SQL : Step 1 out of 5 VSSQL SETTINGS tart by detecting the settings of a Microsoft SQL Server. The server has to be asked to provide the wizard with the name of this server. on NEXT, the wizard will try to connect to the specified Microsoft SQL Server. If it excts, this means OPS SQL has already been set up on this server. In this case, the directly to OPS SQL Server Setup. on to connect to the specified database, it means that OPS SQL OPSDBA user to added to the database. The wizard will attempt to create all needed schemas, at this database is ready for future connections from OPS SQL.
Microsoft SQL Server is a registered trademark of the Microsoft Corporation.	<	T TO MS SQL SERVER : ocalhost\OPSSQL
	<	Wizard supports connections to both Microsoft SQL server and server instance

- 3. Enter a Hach WIMSTM Username and Password (Super, Super by default). Click **Next.**
- 4. The main Server Setup screen will be displayed. Click on the Import Facility tab, then click the ... button to browse for your OPS 32 database to import.

B Hach WIMS Server Setup for Microsoft SQL	. v2.0.0 (Microsoft SQL Server v09.00.3042) 🛛 🔀
Connected to 'LC	CALHOST\OPSSQL'
Existing Facilities	
New Facility Test Tutorial - Rocky Creek WWTP Tutorial - Sandy Beach WTP	Unique Identifier: Facility Name: Data source: Change Name Change Data Source Remove from list
Upload Updates Server Setup New Facility Import From OPS 32 Facility database (.mdb) path:	Restore Console Database Upgrade Import Facility Import Security
Import to Unique Identifier: OPS Data Source: [[local]\DPSS(Advanced Options Execute

NOTE: If you are having trouble identifying which OPS 32 database to import simply log into your database in OPS 32 and the location of the database is displayed in the title bar:

\$) o	PS 32 v3.4.7 -	City WWTP	(C:\0P532	\WWTP'	WWTP.mdb)	
File	Data Manager	Report Pac	Graph Pac	Design	System Setup	Mode

- 5. Enter the unique Identifier and the new facility name. Make sure the Data Source matches your Server Name/Instance of your server. Click **Execute**. The OPS 32 database will be imported. Depending on database size the import can take anywhere from a couple of minutes to several hours.
- 6. Upon completion of the import the following message will be displayed: Click OK.

Connected to 'LOCALHOST\OPSSQL' Existing Facilities Image: Connected to 'LOCALHOST\OPSSQL' New Facility Unique Identifier: Facility Name: Tutorial - Rocky Creek WWTP Facility Name: OPSROCKY Import and NUMS Server Setup for Microsoft SQL OPS ROCKY Import From OK Upgrade Curity Import From OK OPS ROCKY (01_27_2009).log Import to OK OPS Rocky Data Source: Curity Data Source: Curity Data Source: Curity Data Source: Curity	🗴 Hach WIMS Server Setup for Microsoft SQL	v2.0.0 (Microsoft SQL Server v09.00.3042) 🛛 🗙					
Existing Facilities New Facility Unique Identifier: Test Facility Name: Tutorial - Rocky Creek WWTP Facility Name: Tutorial - Sandy Beach WTP Finalizing! OPSROCKY Import Infation Finalizing! Upgrading to latest version 1.3.7 Finalizing! Upgrading to latest version 1.3.7 Finalizing! Upgrading to latest version 1.3.7 Server Success! Success! Log saved as : C: VDoc OK Unique Identific OK Unique Identific OK Unique Identific Execute Import to OK Unique Identific Execute	Connected to 'LOCALHOST\OPSSQL'						
New Facility Test Tutorial - Rocky Creek WWTP Tutorial - Sandy Beach WTP Facility Name: OPSROCKY Important for the facility of the facility Name: Import From Upgrading to latest version 1.3.7 Hach WIMS Server Setup for Microsoft SQL Upgrade Server Successi Import From Log saved as : C: \HachWIMS\ServerSetup_MSSQL \log\OPSROCKY (01_27_2009).log Mach Vinique Identifie OK Upgrade OK Unique Identifie Data Source: [Inported Data Source: [Incal)\OPSSQL Execute	Existing Facilities						
OPSROCKY Import From list Finalizing! Upgrading to latest version 1.3.7 Hach WIMS Server Setup for Microsoft SQL Upgrade Server Success! Import From Log saved as : C: \Doc OK Unique Identifit OK Unique Identifit Imported OPS rocky Data Source: [Incal]\OPSSQL	New Facility Test Tutorial - Rocky Creek WWTP Tutorial - Sandy Beach WTP	Unique Identifier: Facility Name:					
Import from Import do OPS 102 OK Unique Identific Imported OPS rocky Data Source: [local]\OPSSQL Execute	OP5ROCKY	×					
Server Server Setup for Microsoft SQL Upgrade Success! Success! Success! Import From OPS 32 C:\Doc C:\Doc OK OK Unique Identific Imported OPS rocky Data Source: [Incal]\OPSSQL Execute	Upgrading to	latest version 1.3.7					
Server Import From OPS 32 C:\Doc Import to Unique Identific OPS rocky Data Source: (local)\OPSSQL	Hach WIMS Server Setup for	Microsoft SQL Upgrade					
	Server Upport From UPS 32 C:\HachWIMS\ServerSetup_MSSQ C:\HachWIMS\ServerSetup_MSSQ Unique Identifit UNIque	LVogVOPSROCKY (01_27_2009).log					

7. Imported facilities are upgraded to the latest database version during their creation. This means you should be able to login to your new facility immediately.

ISSUES THAT CAN COME UP WHEN IMPORTING:

Hach WIMS[™] Server Setup will do a massive conversion of OPS 32 equations, spread reports, cde forms and graphs so that they can be used in the Hach WIMS[™] system. The most frequent translation that occurs is the VARNUM to VARID translation. Sometimes an error can occur with equation translations (usually when you're importing equations that have the @ symbol in them. They can refer to a facility that does not exist yet). **Do NOT panic or stop the import.** The equations can be fixed later on in the Hach WIMS[™] Client.

As facilities are created, Hach WIMSTM Server Setup creates a database and all tables, stored procedures, and triggers needed for that database. For example, Hach WIMSTM Server Setup created OPSRC database that holds all the tables needed for the Rock Creek WWTP facility.

1.7 Database Upgrades

The facilities in the Hach WIMS system may not be up to date with the current version of Hach WIMS. If this occurs you will need to upgrade these facilities using Server Setup before you are allowed to use them.

NOTE: All users must exit WIMS[™] before Proceeding.

1. Start Server Setup.

G	الارجافاني عكالاتها كال			and the second second
	🕵 Microsoft Update			
6 6	Set Program Access and Defaults		and the second se	
ops	💖 Windows Catalog		and the second	and the second se
	🌯 Windows Update			
Internet Internet Explorer	Fortress Client	THE OWNER		
E-mail	m Accessories	· California and a second		
Microsoft Office Out	Cames Games	A standard and a standard and	States in the state of the	
E in Microsoft Office One	Microsoft Office			
2007	m Startup	•	and a little state of the second	
Windows Media Playe	🏉 Internet Explorer	AND TRANSPORT		
	🔑 Remote Assistance		Hach WIMS AdoCalc Service	
Microsoft Office Exce	🕑 Windows Media Player	and the second se	Hach WIMS Client	
	🛞 Windows Movie Maker		m Hach WIMS DBA Helper Service	
Windows Update	Administrative Tools	A CONTRACTOR OF THE OWNER	Hach WIMS Email Gateway Service	
	Microsoft SQL Server 2005		Hach WIMS GNR Server	
Tour Windows XP	m Oracle Database 10g Express Edition	· Contraction of the second	Hach WIMS LiveUpdate Service	
Microsoft Office Publ	SnagIt 8	·	Hach WIMS Scheduler Service	· · · · · · · · · · · · · · · · · · ·
2007	SourceGear Fortress	•	👼 Hach WIMS Server Setup (MSSQL)) Server Setup (MSSQL Edition)
	m HACH Company	▶ 💼 Hach WIMS™ ▶	Hach WIMS WatchDog Service	
All Programs 🜔	S Microsoft ActiveSync	State Come		
	Log Off O Turn Off Comput	er som her state	2. P. Landard M.	一行 自己 正行的

2. Click Next to Login to server set up. Input Server/Instance Name. Click Next. Input Username and Password. The default Username and Password are: MSSQL SETTINGS DETECTED Wizard has been able to connect to the specified MSSQL server.

Hach WIMS Server Setup for Microsoft SQL : Step 2 out of 5

The service is OPS enabled. To manage OPS SQL facilities, please login as a OPS SQL superuser.

Username: Super Password: Super Click Next.	Hach WIMS Server DETECT MS The wizard will star running. You are as	r Setup for Micro; SSQL SETTI t by detecting the s ked to provide the	OPS SQL Userna OPS SQL Passwo	me: super ord: xxxxx	
	Once you click on succesfully connec wizard take you dir If the wizard canno schema needs to a tables, etc so that	VEXT, the wizard w ts, this means OPS eactly to OPS SQL S t connect to the sp dded to the databas his database is rea	<<< BACK		NEXT >>>
		TO MS SQL SERV	TER : Docalhost(OPSSQL		
	<<< EXIT			NEXT >>>	
Microsoft SQL Server is a registered trademark of the Microsoft Corporation.	<<< EXIT	NEXT >>>			

- 3. Select the Database Upgrade Tab.
- 4. Click the Refresh button to get a list of databases that are not up to date.
- 5. Press the UPGRADE Button. This will upgrade all the databases in the list.

🛿 Hach WIMS Server Setup for Microsoft SQL v2.0.0 (Microsoft SQL Server v09.00.3042) 🛛 🔀						
Connected to 'LO	CALHOST\OPSSQL'					
Existing Facilities						
Imported New Facility Test Tutorial - Rocky Creek WWTP Tutorial - Sandy Beach WTP	Unique Identifier: Facility Name: Data source: Change Data Remove from list					
Server Setup New Facility Upload Updates	Restore Console Database Upgrade					
Click Refresh to scan for facility databases that need to be upgraded OPSROOT - (1.3.4 -> 1.3.7) OPSWWTUTOR: (1.3.4 -> 1.3.7) OPSDWTUTOR: (1.3.4 -> 1.3.7)	UPG RADE Database Upgrade Settings DB Command Timeout: 600 sec					
	Database Upgrade Settings DB Command Timeout: 600 sec Kill all other sessions: 🔽					

- 6. The system needs Full access to the database. It will kick anybody out that is currently accessing any database. It also informs you that you will need to restart your ADOCALC and GNR services once the upgrade is complete. If you understand these requirements, Click the Yes button.
- 7. Upon Success you will be able to log into any of the upgraded facilities.

🛿 Hach WIMS Server Setup for Microsoft SQL v2.0.0 (Microsoft SQL Server v09.00.3042) 🛛 🔀					
Connected to 'LOCALHOST\OPSSQL'					
Existing Facilities					
Imported New Facility Test Tutorial - Rocky Creek WWTP Tutorial - Sandy Beach WTP	Unique Identifier: Facility Name: Data source: Change Name Change Data Remove from list				
Hach WIMS Server Setup for Microsoft S					
Click, C:\HachWIMS\ServerSetup_MSSQL\log OP: OP: OP: OP: OP: OP: OP: OP: OP: OP:	found in pDB_UPGRADE01_27_200911_18.log				
	Database Upgrade Settings DB Command Timeout: 600 sec Kill all other sessions:				

1.8 Hach WIMS[™] Services

Hach WIMSTM installs several NT services. These services perform a variety of tasks that are essential for Hach WIMSTM to run properly. To view your services and to verify they are running go to *Start*, *Run* and run "Services.msc".



Hach WIMS[™] Services and the MSSQL 2005 service should have a Startup Type of Automatic and the Status should always be started. If you are having problems with a service, you may want to restart it. You can do this from the start menu. You can go to each services folder and find the restart services item.

Contraction of the owner	icrosoft Office	•	uesday, January 27, 20	09
2007	🛅 Startup	•		
Windows Media Plaw	Ø Internet Explorer			
Windows Friedia Piaye	💫 Remote Assistance		Hach WIMS AdoCalc Service	•
Microsoft Office Exce	 Windows Media Player 		Hach WIMS Client	•
	Windows Movie Maker		i Hach WIMS DBA Helper Service	•
🥙 Windows Update	Administrative Tools	•	i Hach WIMS Email Gateway Service	•
	microsoft SQL Server 2005	•	🛗 Hach WIMS GNR Server	Restart GNR Server
Tour Windows XP	Oracle Database 10g Express Edition	•	Hach WIMS LiveUpdate Service	Start GNR Server
SQL Server Managen	SnagIt 8	•	Hach WIMS Scheduler Service	Stop GNR Server
Studio Express	SourceGear Fortress	▶	Hach WIMS Server Setup (MSSQL)	•
	HACH Company	► 💼 Hach WIMS™ →	Hach WIMS WatchDog Service	•
All Programs 👂	Microsoft ActiveSync			
	Log Off OTurn Off Comput	New Messages	D: 0	

1.8.1 INI Files

Services in Hach WIMS[™] use INI files to set up some basic initialization settings. All these INI files share at least 3 fields. Additional Fields will be listed under each services section. INI Files are located under each service's directory in the Hach WIMS[™] root directory. (Default is C:\Hach WIMS) INI Settings are formatted as ATTRIBUTE=VALUE. In this section we list attributes and which values are acceptable.

HACHWIMS_CONNECTION_DBTYPE:

For Hach WIMS (with DB Support), this can be equal to 1 or 2. 1 means MS SQL and 2 means Oracle.

HachWIMS_Connection_Provider:

This signifies the OLEDB provider that ADOCALC should use. SQLNCLI is typical.

HachWIMS_Connection_Datasource:

This is your Server Name\instance Name of the Hach $WIMS^{TM}$ database that this service will interact with.

1.8.2 ADOCALC

ADOCALC is the Hach WIMSTM calculation engine. It should be online and connected to your database all the time. When a Hach WIMSTM Client calculates data, it actually sends a calculation request to ADOCALC, the ADOCALC service then performs the calculation and notifies the client that the calc is complete. Example ADOCALC.INI:



KEEPLOGSFOR

The ADOCALC service creates extensive logs of its activity. These logs are located in the log subfolder (default c:\HachWIMS\adocalc\log). This sets the number of days that the log files are kept.

1.8.3 DBAHelper

The Hach WIMS[™] DBAHelper service is responsible for generating back up files of the Hach WIMS[™] system. When a back up is requested from inside Hach WIMS[™], The DBAHelper service will package the backup and place it in a location specified in its INI file.

The INI File has 2 additional fields.

KEEPLOGSFOR

This is the number of days logs will be saved.

LOCATION

This specifies the default path of where DBAHelper will place the backup files.

1.8.4 Email Gateway

The Hach WIMSTM Email Gateway service is responsible for sending emails that are made from Hach WIMSTM to a specified SMTP to be delivered via Email. For additional Information please consult our Knowledge Base. <u>http://www.opssys.com/instantkb/Article.aspx?id=12003</u>

The INI File has 6 additional fields.

KEEPLOGSFOR

This is the number of days logs will be saved.

SMTP

This specifies the SMTP Server.

SMTPPORT

This specifies the port that the SMTP is expecting data to be pushed through.

SMTPAUTH

This tells the email gate way if the SMTP will require authentication (login and password) 1 says that authentication is required. Anything else means that authentication is not required.

SMTPUSER

The Username of for this SMTP Server.

SMTPPASSWORD

The Password for this SMTP Server.

1.8.5 Live Update

The Hach WIMS[™] Live Update service is responsible for automatically downloading and installing Hach WIMS[™] updates.

The INI File has 2 additional fields.

KEEPLOGSFOR

This is the number of days logs will be saved.

HTTP

This is the location that Live Update looks for new versions of Hach WIMS[™] (Default is http://www.opssys.com/support/LiveUpdate/LiveUpdate.aspx)

1.8.6 GNR Server

The Hach WIMS[™] GNR Server service is responsible for sending scheduled reports and graphs to their scheduled output (email, disk, or a printer). The GNR Service may require additional setup (see below in GNR SETUP section).

The INI File has 2 additional fields.

KEEPLOGSFOR

This is the number of days logs will be saved.

HACHWIMSCLIENT

This specifies the path to the Hach WIMS[™] client.

1.8.7 Scheduler

The Hach WIMSTM Scheduler service is responsible for keeping track of scheduled tasks in the Hach WIMSTM System. This keeps track of scheduled database backups, database calculations, scheduled reports, and scheduled graphs.

The INI File has 1 additional field.

KEEPLOGSFOR

This is the number of days logs will be saved.

1.8.9 Watchdog

The Hach WIMS[™] Watchdog service is responsible for making sure all the other services are up and running. When one of its specified services stops illegally, the watchdog service will restart it automatically.

The INI File has 5 additional fields.

KEEPLOGSFOR

This is the number of days logs will be saved.

POLL_EVERY_MS

This specifies how often watchdog checks in on each service.

CONNECTION_TIMEOUT_S

This specifies how long watchdog waits for a service before it's considered timed out.

STAY_CONNECTED

NTSERVICE

This one specifies the name of an NT Service that watchdog needs to keep track of. This entry can be added multiple times to add any NT Service.

1.9 GNR Server Service Setup

GNR may require additional setup depending on how your system is configured. The first thing GNR Server will need is to be logged in as an administrator on the computer it's installed on. The second thing that will need to be set up are the printer for the GNR administrator user that GNR will have access to (including a PDF Printer).

1.9.1 GNR Server Service as Administrator

Services run under the Local System Account do not have access to printer information. In order for the GNR Server to interact with your printers, the GNR Service **MUST** be run under a admin account.

- 1. Open up Services.msc (go to start->run)
- 2. The services.msc window will open up. Search for the Hach WIMS[™] GNR Server Service.
- 3. Right click the Service and select properties.
- 4. Select the Log On Tab.
- 5. Select the "This Account" Radio button.

Services	Hach WIMS GNR Server Properties (Local Computer)
File Action View Help Image: Action View Help Image: Action Image: Action Image: Action Services (Local) Name Action Image: Action Image: Action Image: Action Image: Action Image: A	General Log On Recovery Dependencies Log on as: Local System account Allow service to interact with desktop This account: IWIMS Browse Password: Confirm password: You can enable or disable this service for the hardware profiles listed below: Hardware Profile Service Profile 1 Enabled Disable OK Cancel Anny

- 6. Type in a Windows administrator's account Username and Password
- 7. Click **OK**. This should change the login information for this service.

1.9.2 GNR Server PDF Printer

When you set up GNR to run under an administrator account, GNR has access to printers only added to that account. If you would like to have PDF capabilities, you will need to add a PDF Printer to the User account that GNR Server was setup to run under. Please Visit <u>http://www.opssys.com/instantkb/Article.aspx?id=10032</u> for further instructions and access to files.

- 1. Login as the administrator that GNR Server is running under
- 2. Go to Start/Settings/Printers And Faxes
- 3. Now install at least one printer driver. This driver can be a "dummy driver" and does not need to have any printer hardware behind it. In case you want the GNR Server to print to multiple print locations, set up all drivers needed now.

- File Edit View Favorites Tools	s Help
) Back 🔹 🌖 🔹 🌮 🖉 🖉 Search	© Folders
ddress 🚱 Printers and Faxes	
Printer Tasks 🔗	HP LaserJet 2100 PCL6
📓 Add a printer	Ready
万 Server properties	
Set up faxing	

 Run pdf995_32bit_and_64bit.exe (Downloaded from Knowledge base article, <u>http://www.opssys.com/instantkb/article.aspx?id=12741</u>). Choose a path where you want to extract the installation files.

🐨 WinRAR self-	extracting archive
	 Press Install button to start extraction. Use Browse button to select the destination folder from the folders tree. It can be also entered manually. If the destination folder does not exist, it will be created automatically before extraction.
	Destination folder C:\HachWIMS\PDF995
	Install Cancel

- 5. Click **Install**. The files will be extracted and the program will close.
- 6. In explorer, navigate to the directory where you just extracted the installation files.



- 7. Run pdf995.exe. Let it run through the installation process.
- 8. Once it's done, Answer **NO** to the following message

setup	×
	In order to complete the installation of Pdf995, please install the free Converter. If you have not downloaded it, you can download it free from www.pdf995.com. Do you want to download it now?
	Yes No

- 9. Run **ps2pdf995.exe**, answer **Accept** to the Pdf995 User Configuration message that will appear at the end of the install.
- 10. The installation will confirm success with an IE message:

🚈 Pdf995: Read Me - Microsoft Internet Explorer	
<u>File Edit View Favorites Tools H</u> elp	AU
🕝 Back 🔻 🕘 👻 🖹 👔 🏠 🔎 Search 🖙 Favorites 💣	Media 🐵 😥 😓
Address E C:\pdf995\readme.html	💌 🛃 Go 🛛 Links 🂙
Software	995 Quality and Support at a
Create PDF files quickly and o Welcome: Setup has successfully installed the pdf	995 printer on your system.

11. Run PDFKey.exe

12. Type in your name and the PDF995 key value (parkhurst924).

Enter your name	and the key value and press OK.	
Name:	OPSSQL User	
Key value:	11111111111111111	

13. Click **OK** and you should see the following message:

PDFKey	×
	Thank you. Your copy of pdf995 is fully licensed.
	ОК

14. Log into the PC as the User that the GNR Server Service is running under. Go to Start/Settings/Printers and Faxes

idows			
Microso Wi Star	nt ndows (ndard Edition	Server 200	3
opssql_svc		6	1
	•		
	Capital	1 Chick Davies	0.15
	hdows Microsoft Star 2003 Microsoft Corps opssql_svc	Microsoft Windows Standard Edition	Microsoft Windows Server 200 Standard Edition

15. You should see PDF995 in the printers list

🐌 Pr	inters	and Fa	xes				
Eile	<u>E</u> dit	⊻iew	F <u>a</u> vorites	<u>T</u> ools <u>H</u> elp			
G B	ack *	• ©	1 9 Se	arch 🜔 Fold	ers 🔛 🛨		
Addre	ess 🚱	Printer	s and Faxes				
P	rinter	Tasks		* • 2	HP Laser Jet :	2100 PCL6	DF995 0
	Add	a printe	er		PReady Ready		Ready I

16. Right-Click on PDF995 and select Rename



- 17. Rename to OPSSQL_GNR_PDF995
- 18. In Explorer, navigate to the Hach $\mathsf{WIMS}^{\mathsf{TM}}$ Client folder
- 19. Open Hach_WIMS_Client.INI and add the following 3 settings at the end of the file:

PDFINIPATH=C:\pdf995\res

PDFINIFILE=pdf995.ini

PDFSYNCFILE=pdfsync.ini



- 20. Save Hach_WIMS_Client.INI
- 21. Start the GNR Server.

1.10 Updating the Hach WIMS[™] Client

Updates are periodically released to fix bugs and add minor features to the Hach WIMSTM system. There are two ways to update your Hach WIMSTM Client. The first is using the Live Update service. The second is to manually install the update.

1.10.1 Updating Via Live Update

The Live Update Service will help you do your updating quickly and easily. The way this works is the service is in communication with the Hach WIMSTM servers. You tell your system to check for new updates. Once this completes, if there are any updates, your system will automatically begin the download. Once the download is complete, you will be notified via a Hach WIMSTM Message. You can then tell your client to update you directly.

1. Open Hach WIMS[™] Client and log in to any facility.

Hach WIMS Logon		
HACH [®]	Hach WIMS Standard Hach Water Information Management Version 7.0.0	S [™] nt Solution [™]
De Rigili		
	User Name super	
	Password ****	
Too it is a	- fla	
Facility	Perault	
	OK 🛛 Cancel	W Help
SYSTEMS	Customer ID: 0 Build 3338	System Info
A member of the HACH family	LUCALHUSI (UPSSQL - MS SQL	Connections

2. Go to Help->Support->Check for Updates Now.

🚰 Hach WIMS Express v7.0.0 - SUPER @ "Tutorial - Rocky Creek	WWTP" on LOCALHOST	\OPSSQL.OPSWWTUTOR
File Data Manager Report Pac Graph Pac Design System Setup Utilities	Help	- b
🟡 Home 🕥 Back 😵 Refresh 📇 Print	Contents Chapters	
	Support •	Go To Meeting
	About Hach WIMS	Sup <mark>t</mark> ort Web Site
Operations, Laboratory and Maintenance Software		License Support Status Online Knowledgebase
ROCKY CREEK WW1	P DASHB	Check For Updates Now! Install Latest Update (Runs ClientUp.Exe)

- 3. When Live Update has checked the server for updates, it will respond to you via Hach WIMS[™] Message. (See Hach WIMS[™] Message Section for details). Check your Message Box until you receive a response.
- 4. The response can say a multitude of things. If there is a new update, it will inform you and begin downloading. When it has completed downloading it will inform you in the same manner.
- 5. Once the download is complete, you can install it. Go to Help->Support->Install Latest Update

🚰 Hach WIMS Express v7.0.0 - SUPER @ "Tutorial - Rocky Creek	WWTP" on LOCALHOST	OPSSQL.OPSWWTUTOR
File Data Manager Report Pac Graph Pac Design System Setup Utilities	Help	
🟡 Home 🖄 Back 🔗 Refresh 🔔 Print	Contents Chapters	
	Support •	Go To Meeting
	About Hach WIMS	Support Web Site
Operations, Laboratory and Maintenance Software		License Support Status Online Knowledgebase
ROCKY CREEK WW1	P DASHB	Check For Uptotes Now! Install Latest Update (Runs ClientUp.Exe)

6. If you have other clients installed on other machines, you do not need to download the update again. The update is stored in the database as a blob file that can be retrieved by any client. To force the other clients to update, Open System Setup->Admin Console.

🗞 OPS SQL Admin Console (Super Users ONLY)				
OPS SQL Versions Database Version : 1.3.7	Min Client Version :7.0.0	Min Calc Version :2.0.0	Min GNR Version :2.0.0	
General Settings	Calculation Settings	Calc Load Balancing	Action Scripts	
OPS SQL Messages Check Interval	5000	This setting specifies how ofte OPS SQL client should check messages. Use only values fro	n (in milliseconds) the for new OPS SQL m 1,000 to 60,000.	
Minimum Client Version to login :	700	OPS SQL client cannot login in version is greater or equal to th use only values between 500	nto database unless its ne value specified. Please and 999.	
Minimum GNR Version:	200	GNR Server cannot login into version is greater or equal to th use only values between 100	database unless its ne value specified. Please and 999.	
Minimum Remote Client Version:	200	OPSSQL Remote cannot login unless its version is greater or specified. Please use only valu	n into the master database equal to the value ues between 100 and	
Minimum ADOCALC Version:	200	ADOCALC Service cannot log version is greater or equal to th use only values between 100	in into database unless its ne value specified. Please and 999.	
Minimum DBA_HELPER Version:	200	DBA_HELPER Service canno unless its version is greater or specified. Please use only valu	equal to the value ues between 100 and	
Minimum LIVEUP Version:	200	LiveUpdate Service cannot lo its version is greater or equal to Please use only values between	gin into database unless o the value specified. en 100 and 999.	
Allow Windows/Active Directory	0	This setting specifies whether	to allow pass-through	
Save Changes		[🛃 Close	

7. Change the setting that called "Minimum Client Version to Login:" to the version number that was just download without any periods (7.0.0 is typed in as 700) when a client tries to connect to the server that does not meet this requirement, they will be asked to confirm an update to their client.

1.10.2 Updating Manually

Updating manually requires a bit more work. The idea is the same. You down load an update. You extract the update. You push the update into the server. You tell the server to disallow any user below a certain version. As people login, they will be forced to update.

- 1. Visit <u>www.opssys.com/support.html</u>
- 2. You may need to create an account. If you do not have an account, create one. Log in.
- 3. If you created you account you will need to add your product License number.
- 4. Enter the Hach WIMS[™] Support area.
- 5. Download the latest version of the Hach WIMS[™] Client.
- 6. The Client update is an EXE that when run will extract a Setup Program. Run this EXE and extract the files.
- 7. You will need to run Server Setup. Start->All Programs->Hach Company->Hach WIMS->Hach WIMS Server Setup (MSSQL) and login.
- 8. Go to the Upload Updates Tab.

Hach WIMS Server Setup for Microsoft SQL	v2.0.0 (Microsoft SQL Server v09.00.3042) 🛛 🔀
Connected to 'LC	CALHOST\OPSSQL'
Existing Facilities	
Imported New Facility Test Tutorial - Rocky Creek WWTP Tutorial - Sandy Beach WTP	Unique Identifier: Facility Name: Data source: Change Name Change Data Remove from list
Server Setup New Facility	Import Facility Import Security Restore Console Database Upgrade
Location of Update Package 'setup.exe' file	
	Execute

- 9. Browse to the location where you extracted the update. Select the Setup.exe
- 10. Once you select the setup EXE you will be presented with basic information, such as the version number for the update. You will need this number for later.
- 11. Once the Update has been load, close Server Setup and Open the Hach WIMS[™] Client.
- 12. The update is stored in the database as a blob file that can be retrieved by any client. To force the clients to update, Open System Setup->Admin Console.

🗞 OPS SQL Admin Console (S	Super Users ONLY)		
OPS SQL Versions Database Version : 1.3.7	Min Client Version :7.0.0	Min Calc Version :2.0.0	Min GNR Version :2.0.0
General Settings	Calculation Settings	Calc Load Balancing	Action Scripts
OPS SQL Messages Check Interval :	5000	This setting specifies how ofte OPS SQL client should check messages. Use only values fro	en (in milliseconds) the tor new OPS SQL tom 1,000 to 60,000.
Minimum Client Version to login :	700	OPS SQL client cannot login i version is greater or equal to t use only values between 500	into database unless its he value specified. Please and 999.
Minimum GNR Version:	200	GNR Server cannot login into version is greater or equal to t use only values between 100	database unless its he value specified. Please and 999.
Minimum Remote Client Version:	200	OPSSQL Remote cannot logi unless its version is greater or specified. Please use only val	n into the master database equal to the value ues between 100 and
Minimum ADOCALC Version:	200	ADOCALC Service cannot log version is greater or equal to t use only values between 100	gin into database unless its he value specified. Please and 999.
Minimum DBA_HELPER Version:	200	DBA_HELPER Service canno unless its version is greater or specified. Please use only val	ot login into database equal to the value ues between 100 and
Minimum LIVEUP Version:	200	LiveUpdate Service cannot lo its version is greater or equal t Please use only values betwe	ogin into database unless to the value specified. ten 100 and 999.
Allow Windows/Active Directory	0	This setting specifies whether	to allow pass-through
Save Changes			🛃 Close

13. Change the setting that called "Minimum Client Version to Login:" to the version number that was just download without any periods (7.0.0 is typed in as 700) when a client tries to connect to the server that does not meet this requirement, they will be asked to confirm an update to their client.

1.11 Hach WIMS[™] User Messages

Hach WIMSTM comes with a messaging system that allows any Hach WIMSTM user to send a message to any other Hach v user.

Moreover, the Hach WIMS[™] Services (ADOCALC, DBA_Helper, interfaces …) will use these user messages to report about their behaviors. You can also apply a user message to 'ping' the Services.

To Send a Message to a user or service, go to Utilities, Send Message:

To open your Inbox go to Utilities-> Message Inbox.

1.12 Backing up a WIMS[™] Facility

In Hach WIMS (with DB Support), you must backup your database using your own Database Management software.

1.13 Restoring a Hach WIMS[™] Backup

In Hach WIMS (with DB Support), you must restore your databases using your own Database Management software.

Appendix A: Enabling Relaying on your Email Server for Hach WIMS[™]

The GNR service allows Hach WIMS[™] to send periodic emails, however Hach WIMS[™] itself is not an email server. You must have a machine with an SMTP (email) server already setup. The PC on which the GNR service resides must be able to connect and use your SMTP server to actually send the email. This is called "relaying". By default, relaying is usually disabled as a security consideration. You will need to enable relaying for the PC that is hosting the GNR service.

This guide will explain how to do this through Microsoft Exchange 2003, a popular email server.

NOTE: If you don't feel comfortable with modifying Exchange settings, which can have far-reaching effects, please have your system administrator help you!

1. Open the Exchange System Manager console and navigate through the tree to Servers/Protocols/SMTP/Default SMTP Virtual Server:



2. Click Properties and then click the Access tab:

Virtual Defaultserver for SMTP Properties	? ×
General Access Messages Delivery	
Access control Enable anonymous access and edit the authentication methods for this resource.	Authentication
Secure communication	
View or set the secure communications method used when this virtual server is	<u>C</u> ertificate
accessed.	Communication
Connection control	
Grant or deny access to this resouce using IP addresses or Internet domain names.	Connection
└── Relay restrictions	
Grant or deny permissions to relay e-mail through this SMTP virtual server.	R <u>e</u> lay
OK Cancel	Apply Help

We'll need to modify the Access Control, Connection and Relay Restriction options in order for email to go through. Note that modification might be unnecessary in case your Exchange server has already been setup properly.

- 3. Click the Authentication tab and make sure that the Anonymous Access option is enabled, as the GNR service does not authenticate as a specific user:
- 4. Mark the checkbox for Anonymous access and click **OK**. This should get you back to the Access tab.

Authentication	×
Select acceptable authentication methods for this resouce.	
Anonymous access	
No user name or password required.	
☐ <u>R</u> esolve anonymous e-mail	
☑ Basic authentication (password is sent in clear text)	
Requires ILS encryption	
Default domain:	
✓ Integrated Windows Authentication The client and server negotiate the Windows Security Support Pro Interface.	vider
Grant or deny submit permissions to specific users or groups.	
OK Cancel Help	

5. Now click on Connection. This is where you have to make sure that the machine's IP address that is hosting the GNR service is either listed as an allowed IP address, or is NOT listed as a blacklisted IP address.

Connection		×
Select which computers r	may access this virtual server:	
○ <u>O</u> nly the list below		
All except the list b	pelow	
Computers:		_
Access	IP Address (Mask) / Domain Name	
1		1
<u>A</u> dd <u>B</u> err	iove	
		-
	OK Cancel <u>H</u> elp	

The two radio buttons, "Only the list below" and "All except the list below" control whether the listed IP addresses/Hostnames are either white-listed or black-listed. E.g., if the radio button "Only the list below" is selected and the GNR machine is NOT listed, email sending will not work because the machine is not in the white list; if it's present in the list, all is OK. Conversely, if the radio button "All except the list below" is checked and the GNR machine IP address/hostname is NOT listed, email will work, while if it's in the list, it is black-listed and will get rejected.

Either make sure that it's present in the list if the first radio button is selected, or make sure it's NOT present if the second radio button is selected. Click OK to go back to the Access tab.

6. Click the Relay button to go to the Relay screen. This screen is similar to the Connection screen:

Relay Restrictions		×	
Select which computer may relay through this virtual server:			
Only the list below			
C All except the list b	pelow		
Computers:			
Access	IP Address (Mask) / Domain Name	Ĩ	
of Granted	192.168.16.3		
of Granted	192.168.16.14		
Add Ber	IOVE		
Allow all computers which successfully authenticate to relay, regardless of the list above.			
Grant or deny relay permissions to specific users or groups.			
[OK Cancel <u>H</u> elp		

The logic is the same as in under the allowed connections screen, i.e., the "Only the list below" radio button controls the white-list and you MUST make sure the GNR machine is listed, while the "All except the list below" button controls the black-listed machines and you MUST make sure the machine is NOT listed. Click **OK**.

7. Disable your anti-virus program on the SMTP (email server) machine. This is necessary because the anti-virus program interferes with the way Hach WIMS[™] sends emails.

NOTE: Modifying email settings can have serious security consequences. Please have your system or network administrator help you or do the actual modifications if necessary!

Using MS SQL 2008 DBMS

Driver is SQLNCLI10???