

# MFO 5.3.2

## Install Guide



MaxGauge

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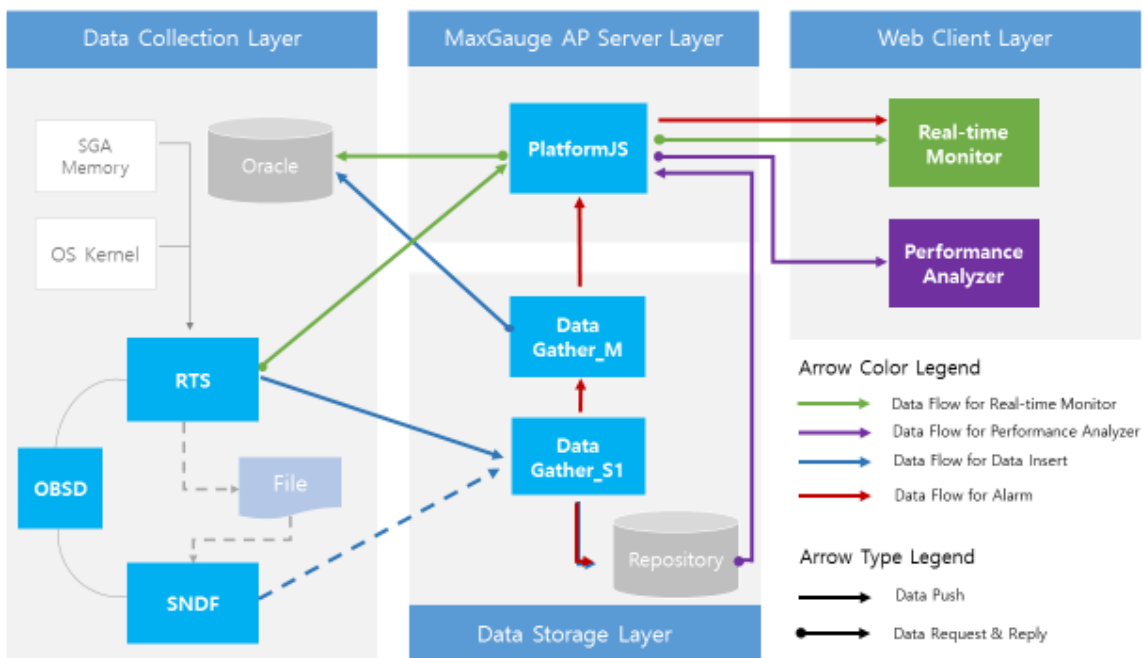
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# 1. MaxGauge Architecture

MaxGauge is composed of the following 4 layers.

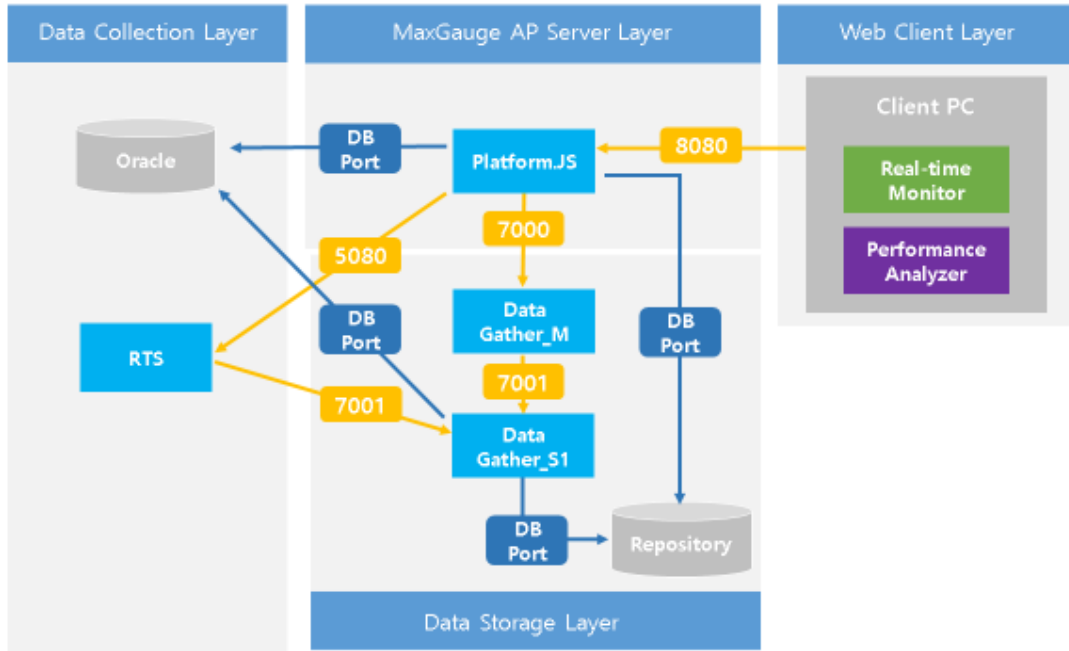
1. **Data Collection Layer:** Data collection
2. **MaxGauge Application Server Layer:** MaxGauge Exclusive Web Server and Application Server
3. **Data Storage Layer:** Data Storage
4. **Web Client Layer:** Real time monitoring and performance analysis.



**Note.** The distinction of MaxGauge AP Server Layer and the Data Storage Layer is a logical one. The two layers may be configured in the same server. For more information about MaxGauge architecture, please reference "[MaxGauge Admin Manual](#)".

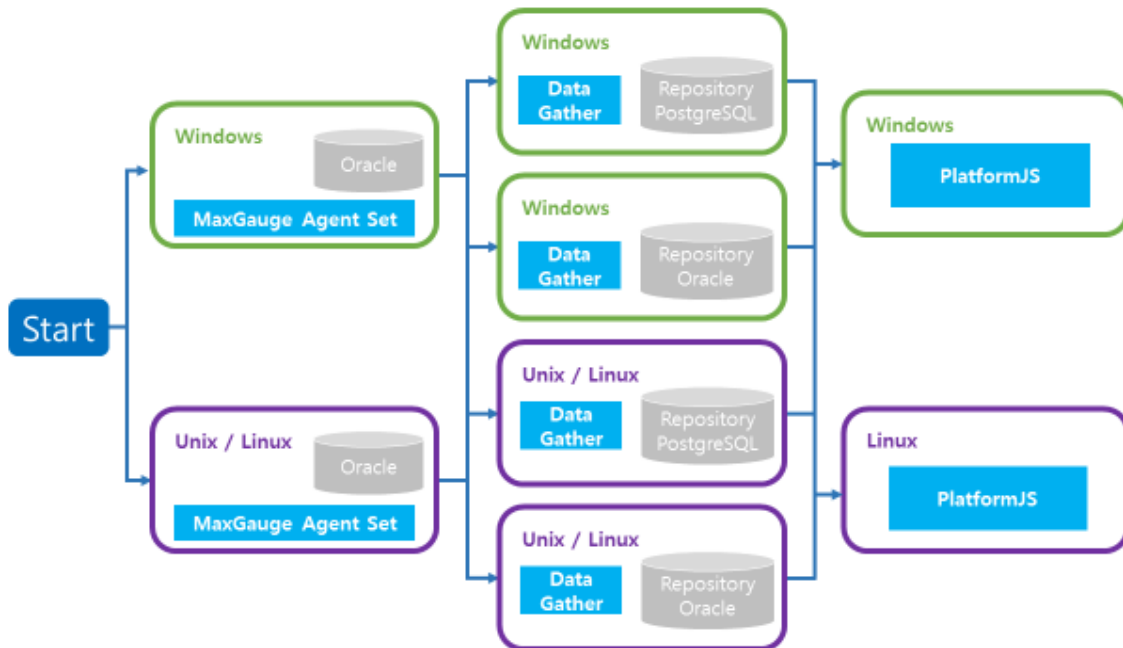
# MaxGauge Network Connection

For MaxGauge installation, the following network port is required.



# Install Steps and Compatibility

Versions compatible with MaxGauge 5.2 and the order of installation steps are as follows.



- 1 Install **MaxGauge Agent Set** according to the OS type of the target Database.
- 2 Install **Data Gatherer** according to the OS type of the Repository Database.
- 3 Install **Platform.JS** on Windows.

## MaxGauge License

The **MaxGauge License Key** is required to run the **MaxGauge Agent Set**.

### Trial License Key

The Trial License Key is for a trial purpose only and is for a limited time use.

### Formal License Key

The Formal License Key is issued only after the product agreement has been completed, and to request for a License Key, the following information is required.

Category	Item
Business Name	<ul style="list-style-type: none"> <li>● Business Name</li> </ul>
OS Information	<ul style="list-style-type: none"> <li>● Unix Type</li> <li>● Unix Version</li> <li>● Unix Bit Level</li> </ul>
Database Information	<ul style="list-style-type: none"> <li>● Oracle Version</li> <li>● Oracle Bit Level</li> <li>● Oracle SID</li> </ul>
Host Server Information	<ul style="list-style-type: none"> <li>● IP Address</li> <li>● Host ID</li> <li>● ERP</li> <li>● Real CPU</li> <li>● Dual Core Count</li> </ul>

---

**Note.** The MaxGauge License policy is the unit of CPU Core, and the validity of the Formal License Key is checked by the database server's Host ID and the number of CPU Cores. Therefore, the Formal License Key which has been issued may only be used in the applicable server, and in the event the number of CPU Cores has increased, an error will be generated in the Formal License Key validation check and the MaxGauge Agent Set will stop operating normally. In the event you need to increase the number of CPU Cores, you must re-apply for a Formal License Key in advance. (Depending on the circumstance, a new contract agreement may be necessary.)

---



# DATA COLLECTING

# SERVER CONFIGURATION

The MaxGauge Agent Set which is installed in the Data Collecting Server is comprised of RTS, OBSD, and SNDF, and the installation is processed through one file. The MaxGauge Agent Set supports both Windows and Unix/Linux OS versions according to the OS type of the target database.

This chapter contains the following sections

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## 2. Data Collecting Server Configuration

### MaxGauge Agent Set (Windows based)

#### Advance Preparation

Item	Standard Recommended Specifications
Oracle Version	Oracle 9i or higher
OS Disk Size	<ul style="list-style-type: none"> <li>● Agent Set Size : 10MB</li> <li>● SNDF Logging Space: 1G or more</li> </ul>

#### Oracle Numa Segment

MaxGauge supports both methods of Uniform Memory Access and the Non-uniform Memory Access (NUMA) and hence, it is necessary to check whether the server is NUMA or not. The method through which you can check for NUMA through the SID sequence is as follows.

```
SQL> select sid from v$session;
```

#### Execution Example

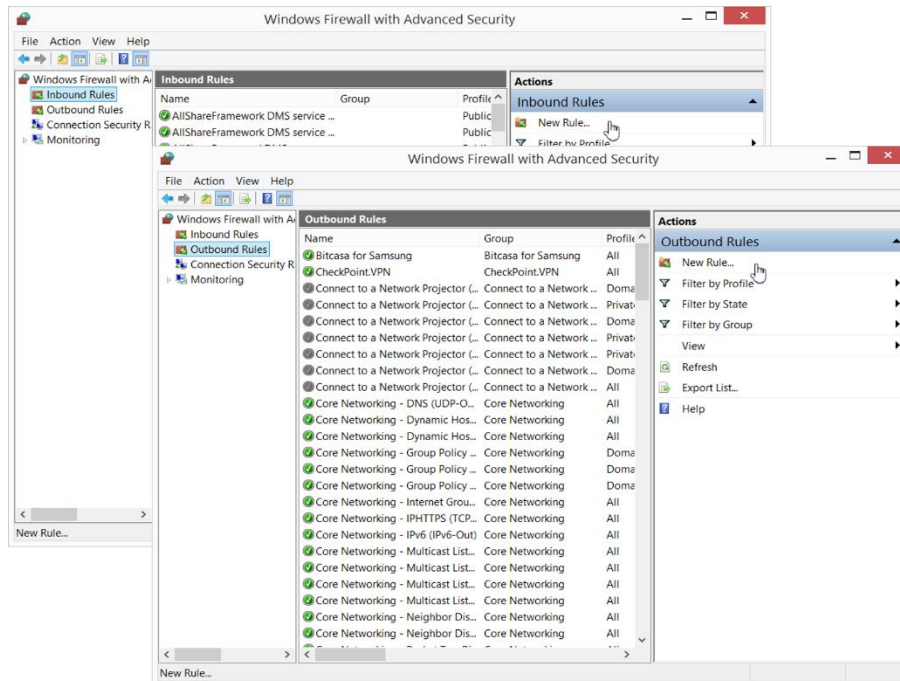
```
SID
-----
 21
 22
126   <- Where there is an increase in the SID sequence, the Numa Segment is used.
127
128
```

**Note1.** Because NUMA aware server uses distributed segments, the SID sequence increases from 10~100. In general, the NUMA segment is used in most of the versions higher than Oracle 11g.

**Note2.** The NUMA used in this context is not referring to the NUMA architecture. It is important to note that depending on whether the Oracle Session Structure Array is located in the continuous memory space or distributed into 2 or more memory space, it is conveniently referred to as UMA or NUMA.

## Network Port

The RTS uses the 5080 port to communicate with Platform. JS. In the control panel, enable 5080 port for both Inbound/Outbound.



## Installation Process

### 1. Installation File Upload

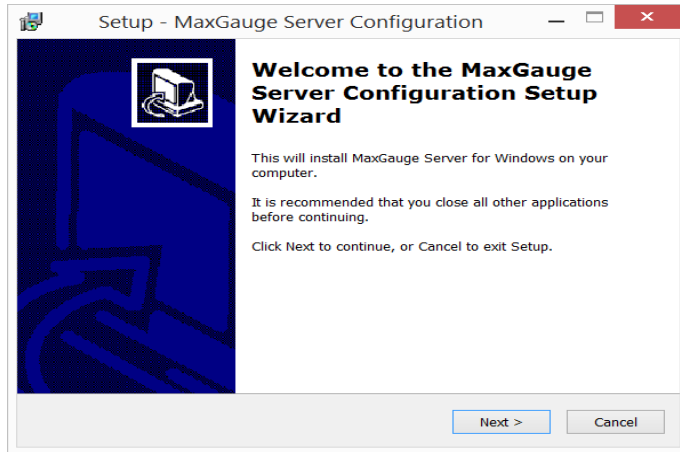
To install MaxGauge, the following installation files are required. For Windows version's MaxGauge Agent, only 2 versions are available. (32bit or 64bit)

File Name	Description
MaxGauge5.2_[OS bit]_Server_Setup.exe	MaxGauge Agent Installation File
License_5.key	License File

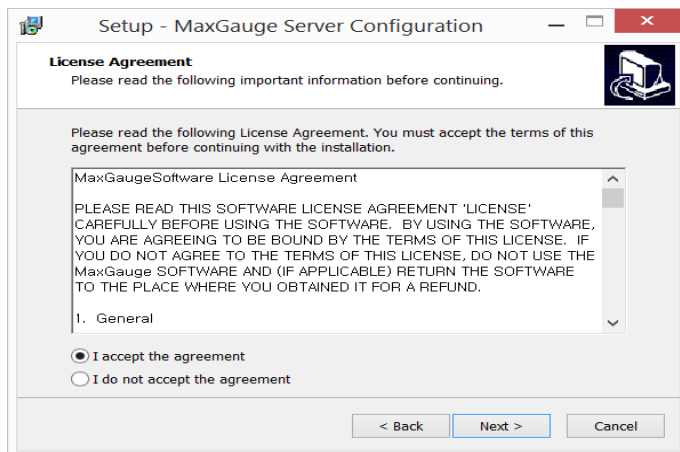
## 2. Run Installer

Follow the steps below to install with the Installer:

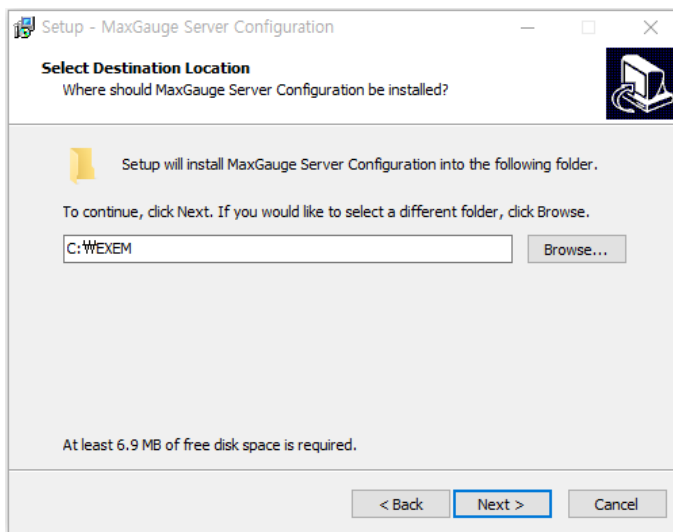
1. Click the **Next** button.



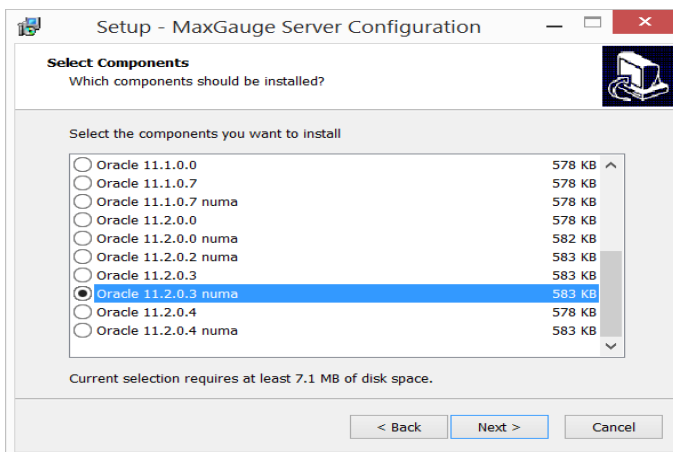
2. Click the **License Agree** button.



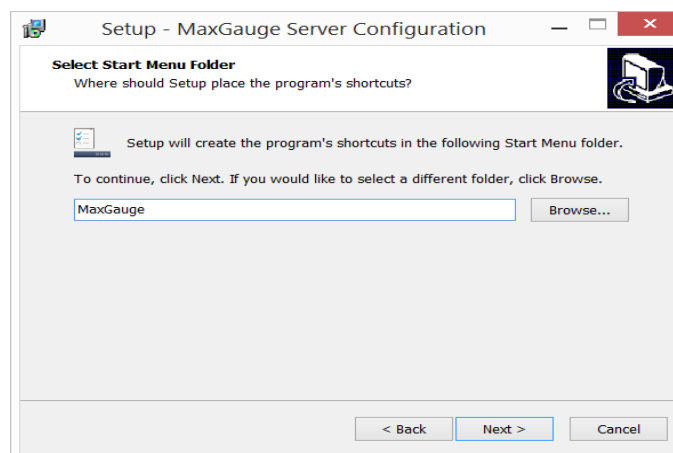
3. Select MaxGauge Home Directory. (※ During installation, be sure to have no blank space within the Home Directory.)



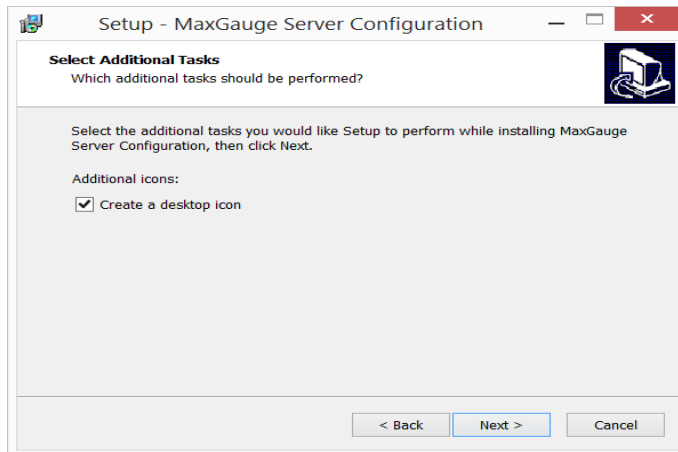
4. Select the installed oracle version.



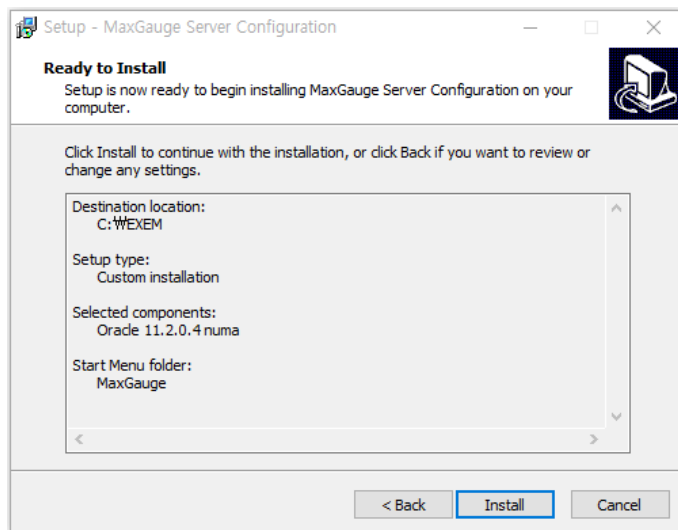
5. Select the Windows Start menu folder name.



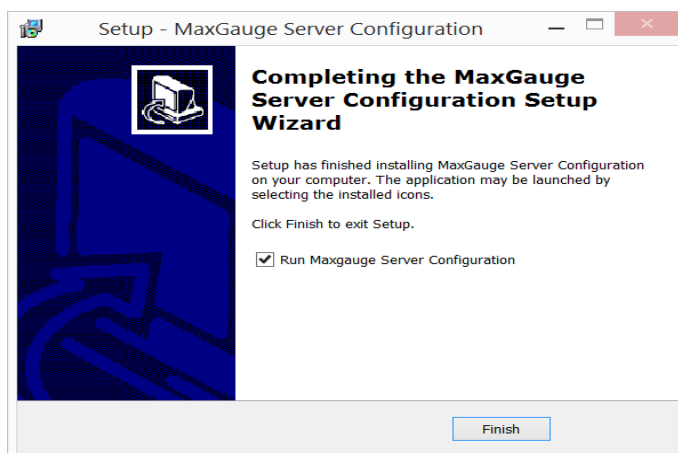
6. Choose whether to create a shortcut icon.



7. Click on the **Install** button to run the installation.

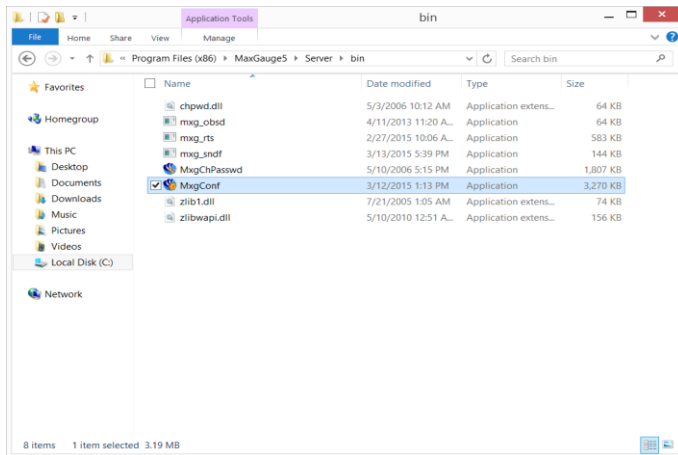


8. Complete the **MaxGauge Server Configuration** and end the installation process.

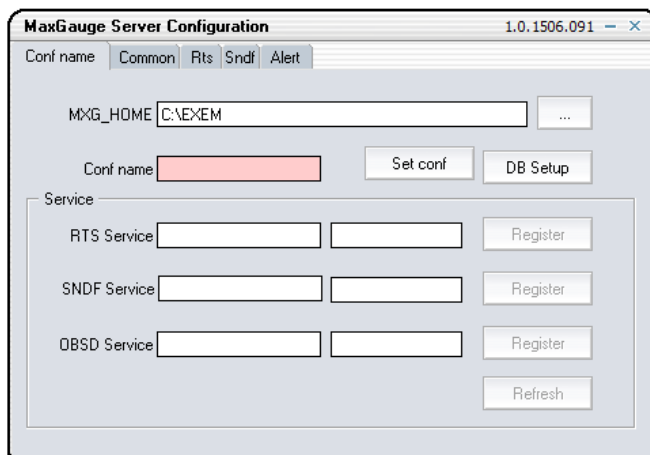


### 3. MaxGauge Server Configuration Execution

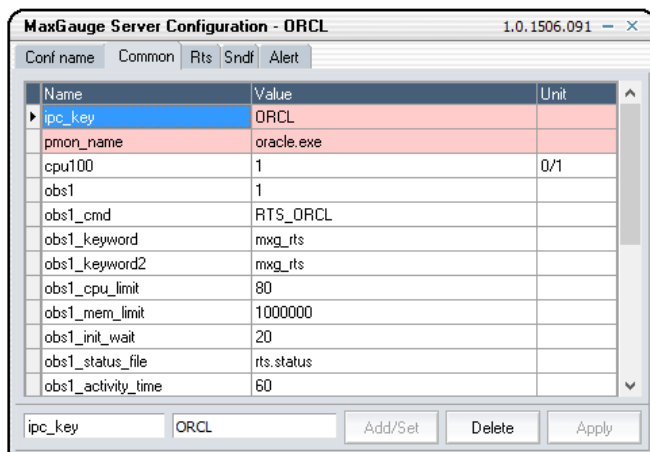
1. Execute the **MxgConf** file under the **{MaxGauge Home Directory}/bin** with the Administrator privileges.



2. Enter the Oracle SID in the **Conf name** and click on the **Set conf** button.



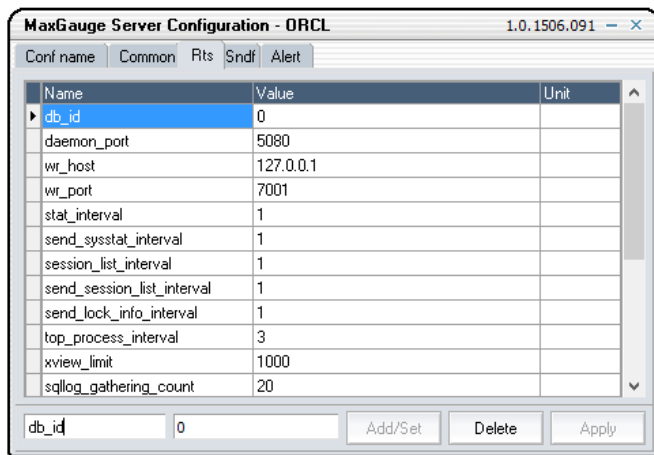
3. Enter the required configuration information in the **Common** Tab.



Parameter	Description
ipc_key	Enter \$ORACLE_SID all in upper case letters.
pmon_name	Oracle PMON Name

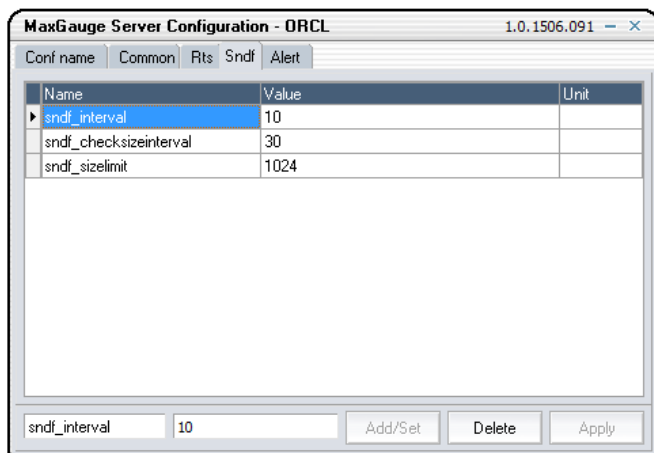
**Note.** For any changes, make the changes directly in the value input box at the bottom and click the Add/Set button.

4. Enter the required configuration information in the **RTS** Tab.



Parameter	Description
daemon_port	Port to communicate with Platform.JS (5080 Recommended)
wr_host	DG Slave Process installation IP address
wr_port	Port to communicate with DG Slave Process (7001 Recommended)

5. Enter the required configuration information in the **SNDF** Tab.

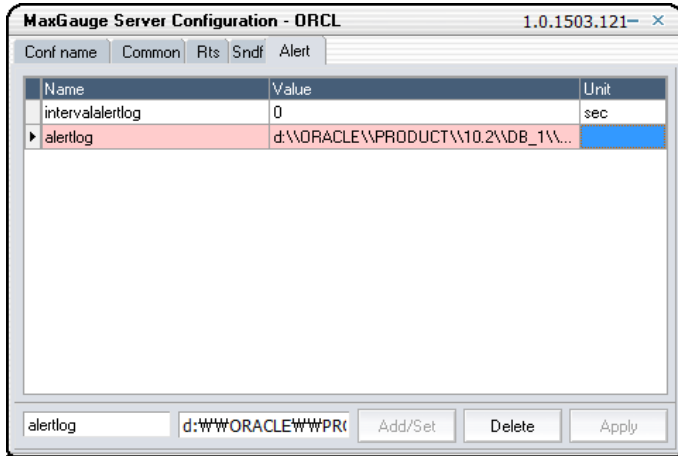


Parameter	Description
wr_host	DG Slave Process installation IP address.



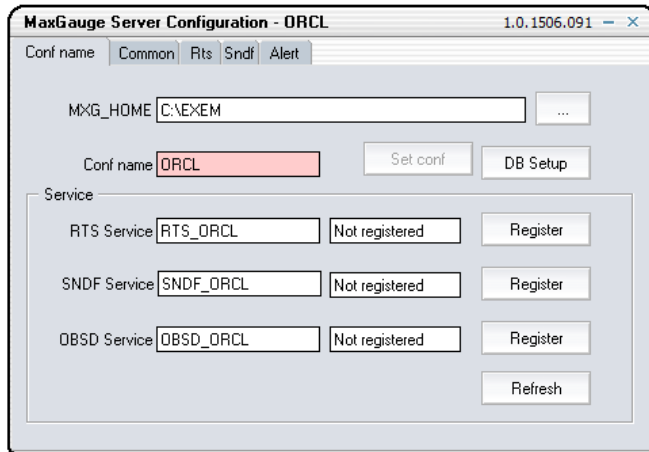
wr_port	Port to communicate with DG Slave Process (7001 Recommended)
sndf_home	{MaxGauge Home Directory}/conf
sndf_path	Path in which SNDF will save the Log File.

6. Enter the required configuration information in the **Alert** Tab.



Parameter	Description
alertlog	Path for Oracle Alert Log

7. Click on the **DB Setup** button in the **Conf name** Tab.



8. In the **DB Setup**, click button in the order of **Setup User**, **Env**, **List.conf**, and **Setup Package**.

Item	Description
User to create	Create MaxaGauge DB User
Password to create	MaxGauge DB User Password
Default Tablespace	MaxGauge User's Default Tablespace
Temp Tablespace	MaxGauge User's Temporary Tablespace
Create XM\$ view in sys account	Create a portion of SYS.X\$ fixed table in XM\$ view.
User	MaxaGauge DB User which was created in the above.
Password	MaxGauge DB User Password which was set in the above.

9. Click the **Register** button to register as a service.

**Note.** If it does not register, download and install the Visual C++ package and execute the MaxGauge Agent Set again to register as a service.

<http://www.microsoft.com/en-us/download/details.aspx?id=40784>

## Run Method

### MaxGauge Agent Set Service

The **MaxGauge Agent Set** is registered as a Windows Local Service in the installation step, and starts running by executing the service in Services (Local).

Name	Description	Status	Startup Type	Log On As
MaxGauge OBSD ORCL		Running	Manual	Local Syst...
MaxGauge RTS ORCL		Running	Manual	Local Syst...
MaxGauge SNDF ORCL		Running	Manual	Local Syst...

## MaxGauge Agent Set (Unix/Linux based)

### Installation Advance Preparation

Item	Standard Recommended Specifications
Oracle Version	Oracle 9i or higher
OS Disk Size	<ul style="list-style-type: none"> <li>Agent Set Size : 10MB</li> <li>SNDF Logging Space: 1G or more</li> </ul>

### Shared Memory IPC key

MaxGauge gets SGA direct access into the Shared Memory through the IPC Key address. The IPC Key of the applicable instance can be checked by the method below.

```

Unix OS:
$ ipcs -m
Linux OS:
$ ipcs -mb

```

### Execution Example

```

----- Shared Memory Segments -----
Key      shmid   owner   perms   bytes   nattch   status
0x00000000 3702785  root    644     80      2
...
0x00000000 4751378  oracle  640    4096    0
0x992513cc 4784147  oracle  640    4096    0

```

**Note.** In the event 2 or more IPC Key values exist in one instance, the correct IPC Key value is identified by using the **Oradebug**.

The method through which you can identify the IPC Key by using the Oradebug is as follows.

```

SYS> oradebug setmypid
Statement processed.
SYS> oradebug ipc
Information written to trace file.
SYS> oradebug tracefile name
/u01/app/oracle/admin/orcl/udump/orcl_ora_00000.trc
SYS> ! cat /u01/app/oracle/admin/orcl/udump/orcl_ora_00000.trc

```

### Execution Example

```

...
Area #5 'skgm overhead' containing Subareas 5-5
Total size 0000000000003000 Minimum Subarea size 00000000
Area Subarea Shmid Stable Addr Actual Addr
   5      5 4784147 0x00000092000000 0x00000092000000
...

```

---

**Note.** Check the shmid value in the 'skgm overhead' area, and identify the corresponding shmid's IPC Key value by using the ipcs command.

---

### Oracle Version

Identify the Oracle Version information of the corresponding instance. The method is as follows.

```
SQL> select * from v$version
```

### Execution Example

```

BANNER
-----
Oracle Database 11g Enterprise Edition Release 11.2.0.1.0 - Production
PL/SQL Release 11.2.0.1.0 - Production
CORE      11.2.0.1.0      Production
TNS for Linux: Version 11.2.0.1.0 - Production
NLSRTL Version 11.2.0.1.0 - Production

```

### Oracle PMON

Identify the Oracle PMON's name and owner of the corresponding instance. The method is as follows.

```
$ ps -ef | grep pmon
```

### Execution Example

```

oracle 45410      1  0 10:12 ?          00:00:01 ora_pmon_orcl
oracle 50915 47737  0 13:47 pts/2    00:00:00 grep pmon

```

## Oracle Numa Segment

MaxGauge supports both methods of Uniform Memory Access and the Non-uniform Memory Access (NUMA) and hence, it is necessary to check whether the server is NUMA or not. The method through which you can check for NUMA through the SID sequence is as follows.

```
SQL> select sid from v$session;
```

### Execution Example

```
SID
-----
 21
 22
126    <- Where there is an increase in the SID sequence, the Numa Segment is used.
127
128
```

---

**Note1.** Because NUMA aware server uses distributed segments, the SID sequence increases from 10~100. In general, the NUMA segment is used in most of the versions higher than Oracle 11g.

**Note2.** The NUMA used in this context is not referring to the NUMA architecture. It is important to note that depending on whether the Oracle Session Structure Array is located in the continuous memory space or distributed into 2 or more memory space, it is conveniently referred to as UMA or NUMA.

---

## Network Port

The RTS uses the 5080 port to communicate with **Platform JS**, and 7001 port to communicate with **Slave Data Gatherer**. The method for checking which port is used is as follows.

```
$ netstat -an | grep 5080
$ netstat -an | grep 7001
```

## MaxGauge OS User

Create a MaxGauge OS User. A MaxGauge user must belong to the dba Group, and use Bash for Linux line and use Ksh for Unix line. The create method is as follows.

```
# useradd -d {home-dir} -s {shell Path} -g {oracle gid} -G {oracle groups} maxgauge
# passwd maxgauge
```

## Maxgauge Profile Setting

For DBMS access, among the oracle user's .profile, add ORACLE\_HOME, ORACLE\_BASE, ORACLE\_SID, PATH to the maxgauge .profile.

### Execution Example

```
PATH=$PATH:$HOME/bin
export PATH
```

```
#Oracle config
export ORACLE_BASE=/app/oracle
export ORACLE_HOME=$ORACLE_BASE/product/11.2/db_01
export ORACLE_SID=orcl
#export EDITOR=vi
#Linux config
export CLASSPATH=$ORACLE_HOME/JRE/lib:$ORACLE_HOME/jlib
export PATH=$PATH:$ORACLE_HOME/bin
export $ORACLE_HOME/lib/libclntsh.*
export LANG=en-US.UTF-8
```

## Installation Process

### 1. Installation File Upload

MaxGauge needs the following installation files, and the corresponding files are uploaded in a binary format.

File Name	Description
rts_MXG52_[OS Ver]_[Bit]_[Oracle Ver]_[NUMA].tar	MaxGauge Agent Set Installation File
License_4.key	License File

Execution Example

Ex) OS : Linux 6.2, Oracle Version : 11.2.0.1, Numa Segment

```
FTP> put rts_MXG52_linux_64_oracle_112_numa_141128.tar
FTP> put License_4.key
```

### 2. Unzip Installation Files

Unzip the uploaded files in the MaxGauge user home directory. The unzip method is as follows.

```
$ tar -xvf rts_MXG52_[OS Ver]_[Bit]_[Oracle Ver]_[NUMA].tar
```

Execution Example

```
$ tar -xvf rts_MXG52_linux_64_oracle_112_numa_141128.tar
```

Copy the newly created MaxGauge folder with the corresponding instance's Oracle SID (Upper Case Letters). The copy method is as follows.

```
$ cp maxgauge $ORACLE_SID
```

### 3. MaxGauge Environment File Configuration

Edit the MaxGauge environment variable (**.mxgrc**) file and configure the MaxGauge home directory path.

```
$ vi $HOME/$ORACLE_SID/.mxgrc.
```

**Execution Example**

```
# MaxGauge home directory
MXG_HOME={MaxGauge Home Directory}/{ORACLE SID}
...
```

**Execution Example**

Ex) Maxgauge USER Home = /home/maxgauge, Oracle\_SID = ORCL

```
$ vi /home/maxgauge/ORCL/.mxgrc

# MaxGauge home directory
MXG_HOME = /home/maxgauge/ORCL
```

After configuring the path, add the .mxgrc path to the user's .profile and apply. The application method is as follows.

```
$ vi $HOME/.profile

PATH=$PATH:$HOME/bin
export PATH
. {MaxGauge Home Directory}/{ORACLE SID}/.mxgrc
...
:wq!
$ . {MaxGauge Home Directory}/{ORACLE SID}/.mxgrc
```

**Execution Example**

```
$ vi /home/maxgauge/.profile

PATH=$PATH:$HOME/bin
export PATH
./home/maxgauge/ORCL/.mxgrc
...
:wq!
$ ./home/maxgauge/ORCL/.mxgrc
```

**4. Install Script Execution**

Use the **install.sh** in the Install folder and run the automatic installation.

Item	Description
Database owner	The Oracle user who ran the Oracle Instance
Conf name	Enter \$ORACLE_SID in upper case letters.
IPC Key	Installation Requirement Checklist's Oracle Shared Memory Key

PMON process	Installation Requirement Checklist's Oracle PMON Name
RTS TCP port	Port to communicate with Platform.JS (5080 Recommended)
Data Gather IP address	DG Slave Process' installation IP address
Data Gather Port	Port to communicate with DG Slave Process (7001 Recommended)
Oracle sys password	Oracle sys User Password (1)
Oracle MaxGauge user	Create MaxaGauge DB User
Oracle MaxGauge Password	MaxGauge DB User Password
Default Tablespace	MaxGauge User's Default Tablespace
Temporary Tablespace	MaxGauge User's Temporary Tablespace
Conf file	Create Server Agent Configuration File
Password file	Create Agent Password File Select Corresponding Server OS (1:Unix 2:Linux, Windows)
Run_by_sys	Create MaxGauge DB Use and Grant Privileges
Expkg package	Install package to be used by MaxGauge DB user.
Env	Create Agent's required environment file
List.conf	Create Agent's required environment file

### Execution Example

```

$ cd $MXG_HOME/install
$. install.sh

Welcome to MaxGauge5 Daemon setup
Enter Database owner: [oracle]
oracle

Enter Maxgauge conf name: [orcl]
ORCL

1) 0xd3ac6c80
Select ipc key: 1
ipc key : d3ac6c80

===== ora_pmon_orcl
ora_pmon_orcl
Select pmon process name: 1
pmon name : ora_pmon_orcl

LISTENER INFO: [ *.1521|*:1521|127.0.0.1.1521|127.0.0.1:1521 ]
*.1521

RTS TCP Port number : [5080]

```



```

5080

DataGather IP Address : []
192.168.0.10

DataGather Port number : [7001]
7001

Oracle sys pass:
1

Oracle maxgauge user: [maxgauge]
maxgauge

Oracle maxgauge pass:
*****

Default Tablespace for MaxGauge: [USERS]
USERS

Temporary Tablespace for MaxGauge: [TEMP]
TEMP

=====Confirm Variables =====
Conf name ORCL
IPC key d3ac6c80
pmon name ora_pmon_orcl
TCP port 5080
DataGather IP 192.168.0.10
DataGather port 7000
Maxgauge user maxgauge
Oracle sys user sys
=====

conf directory created.
Make conf files (rts.conf) ? (y/n) [y]
....
Select passwd File (1:Unix 2:Linux,Win) ? [2]
....
run run_by_sys ? (y/n) [y]
....
Install expkg package ? (y/n) [y]
....
make env ? ( y/n ) [y]
....
make list.conf ? ( y/n ) [y]
....

```

## 5. Apply License File

Move the **License file** to \$MXG\_HOME/bin directory.

```
...  
$ mv $HOME/License5.key $MXG_HOME/bin  
...
```

## Run Method

### RTSCTL Command

**RTSCTL** is a utility for controlling the **MaxGague Agent Set**, and there are two methods – the Non Interactive Mode method which is used in the OS command line, and the Interactive Mode method which is used in the **RTSCTL** utility. The **RTSCTL** utility's method is as follows.

```
#Non Interactive Mode Usage:
$ rtsctl <start | stop | status | restart > {config_name}
$ rtsctl version
#Interactive Mode Usage:
$ rtsctl
RTSCTL> <start | stop | status | restart > {config_name}
RTCCTL> <version | quit | exit >
```

Operation	Description
start	Start MaxGauge Agent Set
stop	Stop MaxGauge Agent Set
status (stat)	Check status of MaxGauge Agent Set
restart	Restart MaxGauge Agent Set
version (ver)	Output MaxGauge Agent Set version information
quit (q)   exit   (e)	RTSCTL Exit (Interactive Mode only)

**Note.** For details about RTSCTL utility and execution examples, please reference "[MaxGauge Admin Manual](#)".

## User Defined Option

### SNDF Logging Space Configuration

The SNDF manages the Temp File logged by the RTS, and executes the sending function. To change the Storage Space Size of the Temp File, the method is as follows.

```
$ vi $MXG_HOME/conf/sndf.conf

# sndf configuration
sndf_interval=10
sndf_checksizeinterval=30
sndf_sizelimit=1024
:wq!
```

Item	Description
Syntax	sndf_sizelimit= <i>integer (MB)</i>
Registration Category	Automatic Registration

Default value	1024
---------------	------

## Exceptions

### MakeConf Script Error

When executing Install.sh, if it doesn't create the Conf file, reference the items below.

```
$ {Maxgauge Home Directory}/{ORACLE_SID}/install
```

Script Name	Description
Makealertconf (get_alert_name.sql)	Creates the environment file for Oracle Alert Log's path information, and among the corresponding Script's variables, use the results of get_alert_name.sql for the Alert Log. {ORACLE_SID} {Oracle Alert Log Path & Name}
Makecommonconf	Create the required environment file for Direct Memory Access in the Oracle SGA. {ORACLE_SID} {IPC_KEY} {PMON_NAME}
Makertsconf	Create real time data and log data sending environment file. {ORACLE_SID} {RTS_PORT} {DG_IP_ADDRESS} {DG_PORT}
Makesndfconf	When RTS Logging is abnormal, create an environment file to prevent log omission. {ORACLE_SID} {DG_IP_ADDRESS} {DG_PORT}

### Script Run Method and Variable Entering Method

```
FILE_PATH: {Maxgauge Home Directory}/{ORACLE_SID}/install
# START ALERT LOG PATH
SQL>@get_alert_name.sql
/app/oracle/diag/rdbms/orcl/ORCL/trace/alert_ORCL.log <- "Oracle Alert Log Path & Name "

#START ALERT LOG FILE CREATE
$. makealertconf {ORACLE_SID} {Oracle Alert Log Path & Name}
ex) $. makealertconf ORCL /app/oracle/diag/rdbms/orcl/ORCL/trace/alert_ORCL.log

# START COMMON FILE CREATE
$. makecommonconf {ORACLE_SID} {IPC_KEY} {PMON_NAME}
ex) $. makecommonconf ORCL 0x992513cc ora_pmon_ORCL

# START RTS FILE CREATE
$. makertsconf {ORACLE_SID} {RTS_PORT} {DG_IP_ADDRESS} {DG_PORT}
ex) $. makertsconf ORCL 5080 192.168.0.10 7000

# START SNDF FILE CREATE
$. makesndfconf {ORACLE_SID} {DG_IP_ADDRESS} {DG_PORT}
```

```
ex) $. makesndfconf ORCL 192.168.0.10 7000
```

## Password File Error

When executing Install.sh, if it doesn't create the password file, reference the items below.

```
FILE_PATH: {Maxgauge Home Directory}/maxgauge/conf/passwd/{OS TYPE}/
$ cp passwd {Maxgauge Home Directory}/{ORACLE_SID}/conf/{ORACLE_SID}
```

```
ex)$ cp passwd /home/maxgauge/ORCL/conf/ORCL/
```

## Run by sys.sql Error

When executing Install.sh, if it fails in MaxGauge user create and grant privileges, reference the items below.

```
$ sqlplus DBA or SYS User Login

# Maxgauge user Password, Default Tablespace, Temporary Tablespace
SQL>
CREATE USER maxgauge IDENTIFIED BY &password
DEFAULT TABLESPACE &default_ts
TEMPORARY TABLESPACE &temp_ts;

GRANT RESOURCE TO maxgauge ;
GRANT CREATE SESSION TO maxgauge;
GRANT CREATE DATABASE LINK TO maxgauge;
GRANT SELECT_CATALOG_ROLE maxgauge;
GRANT SELECT ANY TABLE TO maxgauge
GRANT CREATE ANY PROCEDURE TO maxgauge
GRANT EXECUTE ON SYS.DBMS_SESSION TO maxgauge
GRANT EXECUTE ON SYS.DBMS_SYSTEM TO maxgauge
GRANT ALTER SESSION TO maxgauge
GRANT ALTER SYSTEM TO maxgauge
GRANT SELECT ANY DICTIONARY TO maxgauge
```

## Expkg.plb Error

When executing Install.sh, if it fails in package create, reference the items below.

```
FILE_PATH : {Maxgauge Home Directory}/{ORACLE_SID}/util/db_setup
```

```
$ sqlplus maxgauge/*****
SQL> expkg.plb
```

```
Package created.
```

```
No errors.
```

```
Package body created.
```

No errors.

## Env & List.conf Error

When executing Install.sh, if it fails in Env and List.conf file create, reference the items below.

```
FILE_PATH: {Maxgauge Home Directory}/{ORACLE_SID}/util/db_setup
# Env Create
$ . mke.sh

# List.conf Create
$ sqlplus DBA or SYS User Login
SQL> listconf.sql
```

# DATA

# STORAGE

# SERVER

# CONFIGURATION

This chapter contains the following sections

<a href="#">3. Data Storage ServerConfiguration</a> .....	32
<a href="#">PostgreSQL Repository (Windows based)</a> .....	32
<a href="#">Oracle Repository (Windows based)</a> .....	50
<a href="#">Oracle Repository (Unix/Linux based)</a> .....	62

## 3. Data Storage Server Configuration

The **Data Storage Server** is composed of **Platform.JS**, **Data Gatherer**, and the **Repository Database**. The OS type supported by each item is as follows.

Installation Item	Supported OS
Platform.JS	Windows
Data Gatherer	Windows, Unix/Linux
Repository Database	PostgreSQL (Windows, Linux) Oracle (Windows, Unix/Linux)

### PostgreSQL Repository (Windows based)

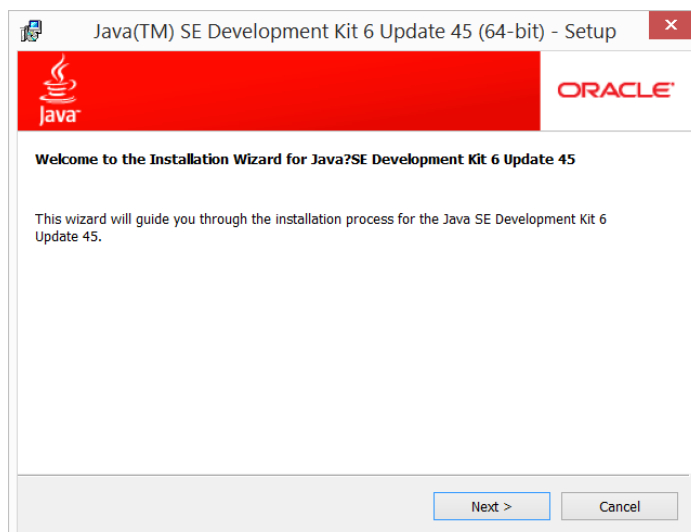
#### Advance Preparation

##### Java (JDK 1.6 or higher)

Java is installed in the same server as the **Data Gatherer**. The installation method is as follows.

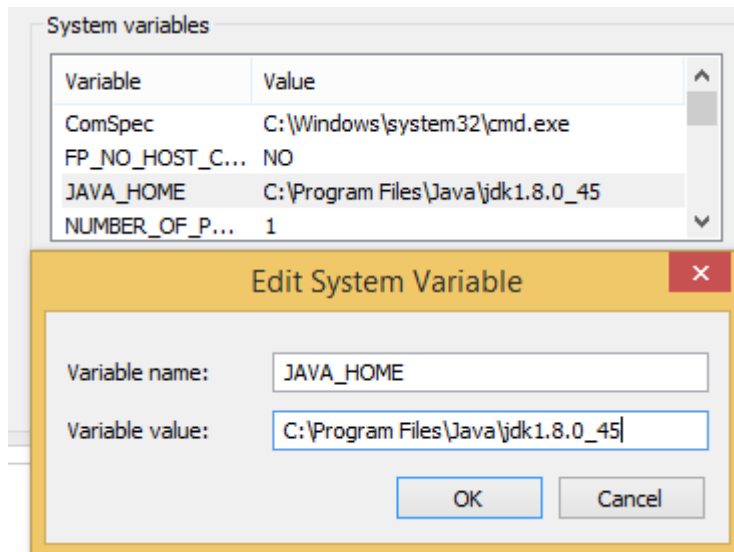
1. Download JDK and install.

<http://www.oracle.com/technetwork/java/javase/downloads/index.html>



2. Create JAVA\_HOME environment variable.





---

**Note.** In general, Java is installed the same as the Bit Level of the installed OS.

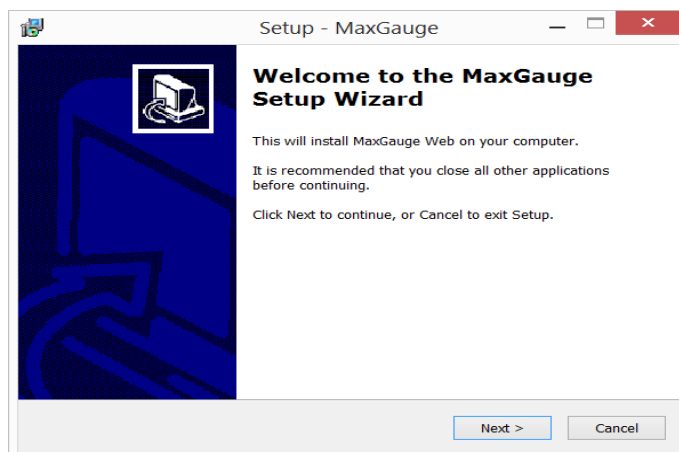
---

## Installation Process (Automatic)

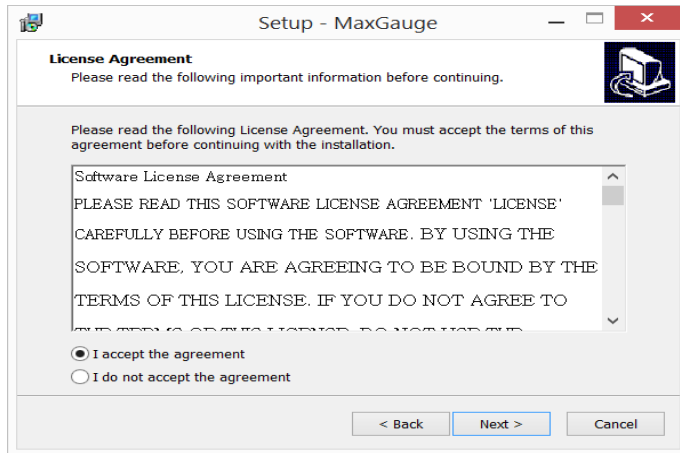
### Integrated Installer Execution

Installation method through the integrated installer is as follows.

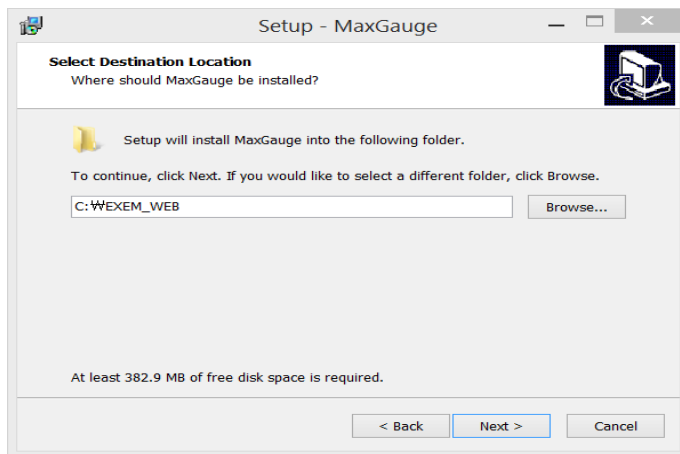
1. Click the **Next** button.



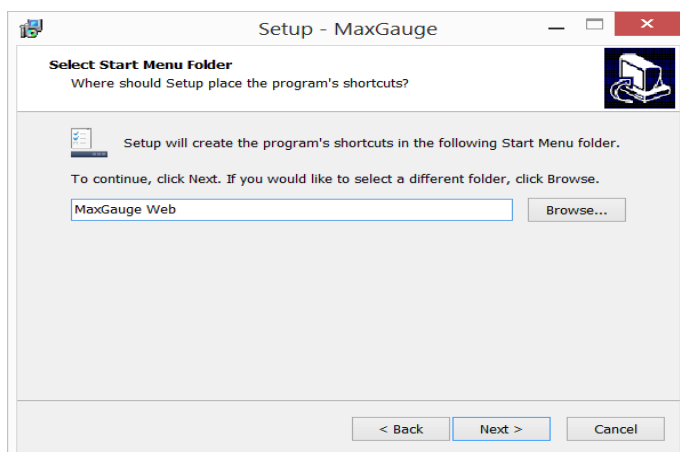
2. Click the **License Agree** button.



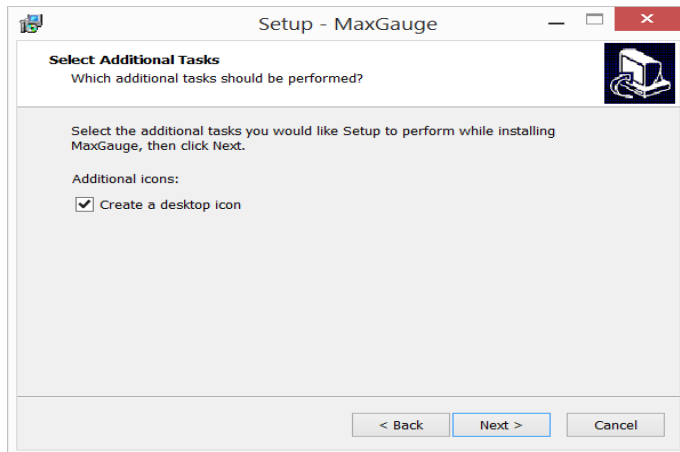
### 3. Select the MaxGauge Home Directory.



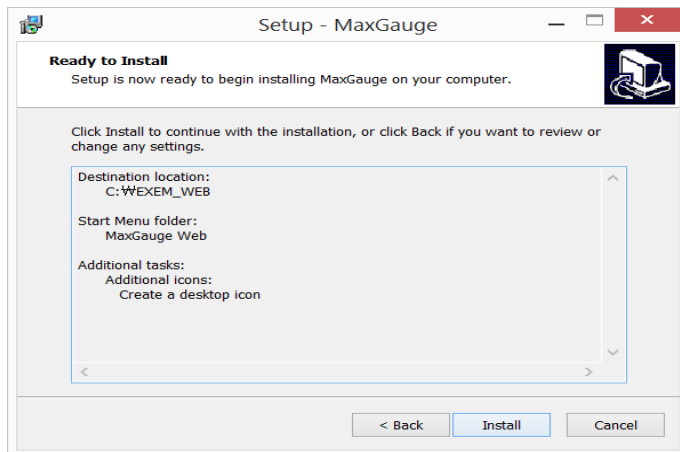
### 4. Select the Windows Start Menu Folder name.



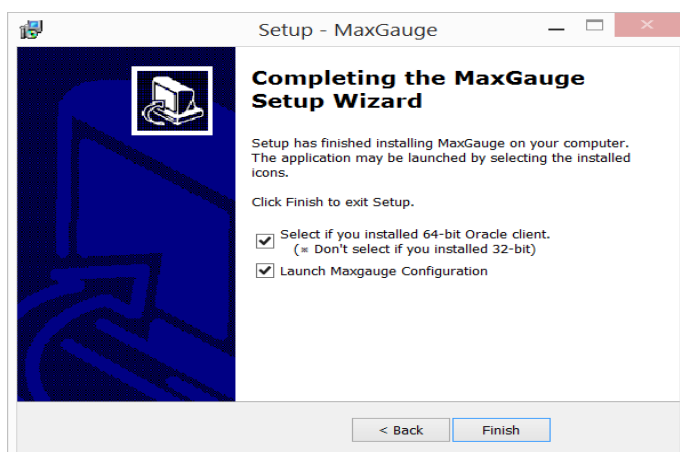
5. Choose whether to create a shortcut icon.



6. Click on the **Install** button to run the installation.



7. Execute Platform.JS which is the same as the bit of the installed Oracle Client.




---

**Note.** Once the installation is complete, Platform.JS, Data Gatherer, and PostgreSQL are automatically registered as local services .

---

## Installation Process (Individual Installation)

### PostgreSQL Individual Installation

In this Install Guide, we will not discuss the details regarding PostgreSQL Database installation. For information regarding the corresponding database installation, please see the PostgreSQL's official Install Guide.

#### Repository Maxgauge User Configuration

For Repository DB's Maxgauge User, use the super user (postgres).

---

**Note.** When you need to create a separate user, grant super user's privileges.

---

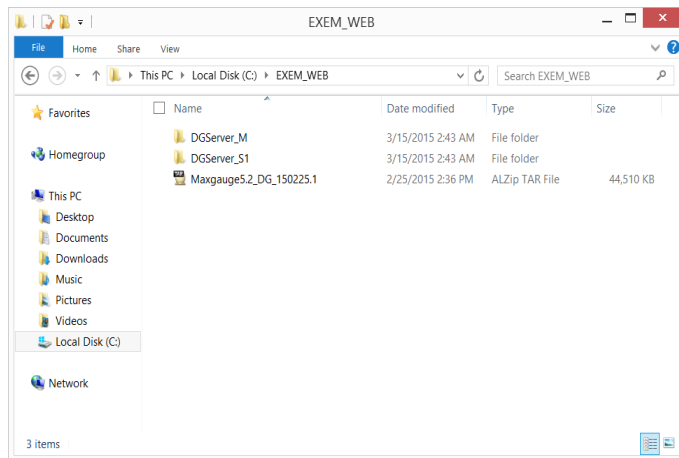
#### Repository Parameter Configuration

The PostgreSQL Database Parameter

Parameter name	Recommended settings (Memory 16GB standard)
max_connections	300
shared_buffers	4GB
temp_buffers	64MB
work_mem	64MB
effective_cache_size	1GB
enable_seqscan	off
logging_collector	off
default_transaction_isolation	read uncommitted
log_truncate_on_rotation	on
log_rotation_size	0
wal_sync_method	fsync_writethrough (Windows) / fdatasync (Linux)
fsync	off
constraint_exclusion	partition
checkpoint_segments	32
track_counts	off

## Data Gatherer Individual Installation

1. Unzip the **MaxGauge5.2\_DG.tar** in the MaxGauge installation path.



2. Edit the **Data Gather\_S1/conf/ DGServer.xml** file's configuration.

```

1  <?xml version="1.0" encoding="EUC-KR"?>
2  <DataGather>
3    <DefaultOptions>
4      <master>false</master>
5      <gather_port>7001</gather_port>
6    <ClientPool>
7      <client_pool_init_size>10</client_pool_init_size>
8      <client_pool_max_size>30</client_pool_max_size>
9    </ClientPool>
10   <DBPool>
11     <database_type>postgres</database_type>
12     <database_ip>127.0.0.1</database_ip>
13     <database_port>5432</database_port>
14     <database_sid>maxgauge_pg</database_sid>
15     <database_user>postgres</database_user>
16     <database_password>postgres</database_password>
17     <connection_pool_init_size>5</connection_pool_init_size>
18     <connection_pool_max_size>10</connection_pool_max_size>
19     <sys_conn_max>2</sys_conn_max>
20     <ses_conn_max>2</ses_conn_max>
21     <oth_conn_max>2</oth_conn_max>
22     <sys10min_conn_max>1</sys10min_conn_max>
23     <sysdaily_conn_max>1</sysdaily_conn_max>
24     <sqldaily_conn_max>1</sqldaily_conn_max>
25   </DBPool>
26   <DatabaseType Oracle>
27     <commit write></commit write>

```

Parameter Name	Description
gather_port	Port to communicate with MaxGauge Agent Set (7001 Recommended)
database_type	Set the Repository's Database Type. <ul style="list-style-type: none"> <li>● PostgreSQL Database: postgres</li> </ul>
database_ip	Set the IP of the Repository Database to be connected to JDBC. <ul style="list-style-type: none"> <li>● Default Value: 127.0.0.1</li> </ul>
database_port	Set the Listener Port of the Repository Database to be connected to JDBC. <ul style="list-style-type: none"> <li>● Default Value: 5432</li> </ul>
database_sid	Set the name of the Repository Database to be connected to JDBC. <ul style="list-style-type: none"> <li>● PostgreSQL Database: Database Name</li> </ul>
database_user	Set the User Name of the Repository Database to be connected to JDBC. <ul style="list-style-type: none"> <li>● PostgreSQL Database: postgres</li> </ul>
database_password	Set the User Password of the Repository Database to be connected to JDBC. <ul style="list-style-type: none"> <li>● PostgreSQL Database: postgres</li> </ul>

### 3. Edit the **Data Gather\_M/conf/DGServer.xml** file configuration.

```

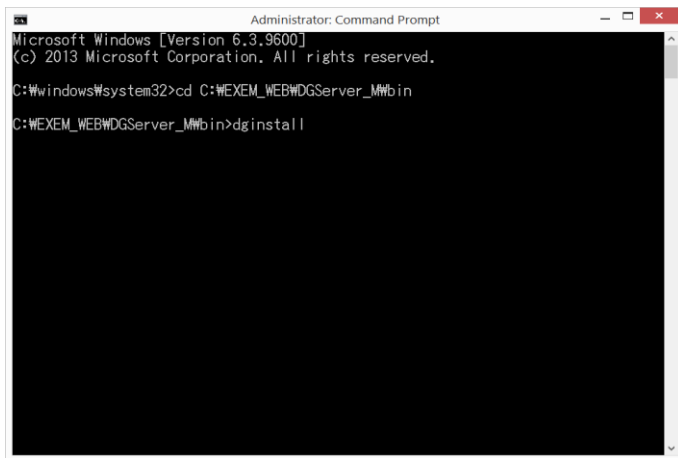
1  <?xml version="1.0" encoding="EUC-KR"?>
2  <DataGather>
3    <DefaultOptions>
4      <master>true</master>
5      <gather_port>7000</gather_port>
6      <slave_gather_list>127.0.0.1:7001</slave_gather_list>
7    <ClientPool>
8      <client_pool_init_size>10</client_pool_init_size>
9      <client_pool_max_size>30</client_pool_max_size>
10   </ClientPool>
11   <DBPool>
12     <database_type>postgres</database_type>
13     <database_ip>127.0.0.1</database_ip>
14     <database_port>5432</database_port>
15     <database_sid>maxgauge_pg</database_sid>
16     <database_user>postgres</database_user>
17     <database_password>postgres</database_password>
18     <query_timeout>0</query_timeout>
19   </DBPool>

```

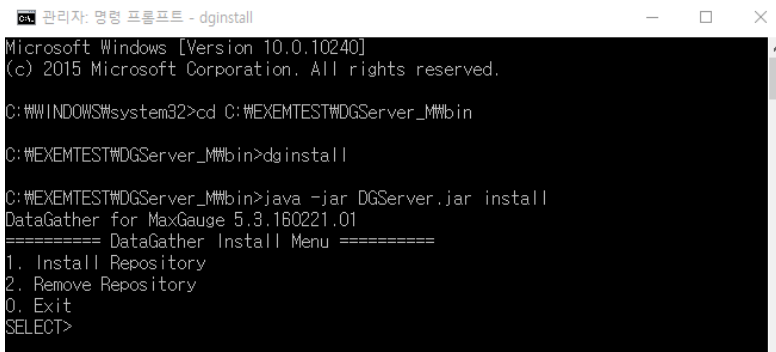
Parameter Name	Description
gather_port	Port to communicate with Platform.JS (7000 Recommended)
slave_gather_list	Set the Slave DG List <ul style="list-style-type: none"> <li>● IP: Configured in a port format. Use a comma ',' to add a slave. ex) 127.0.0.1:7001,127.0.0.1:7002</li> </ul>
database_type	Set the repository database type. <ul style="list-style-type: none"> <li>● PostgreSQL Database: postgres</li> </ul>
database_ip	Set the IP of the repository database to be connected to JDBC.
database_port	Set the repository database port to be connected to JDBC.
database_sid	Set the repository database name to be connected to JDBC.

	<ul style="list-style-type: none"> <li>● PostgreSQL Database: Database Name</li> </ul>
database_user	<p>Set the user name of the repository database port to be connected to JDBC.</p> <ul style="list-style-type: none"> <li>● PostgreSQL Database: postgres</li> </ul>
database_password	<p>Set the user password of the repository database port to be connected to JDBC.</p> <ul style="list-style-type: none"> <li>● PostgreSQL Database: postgres</li> </ul>

4. Execute the **Data Gather\_M/bin/dginstall.bat** file in the Command Prompt (Administrator).



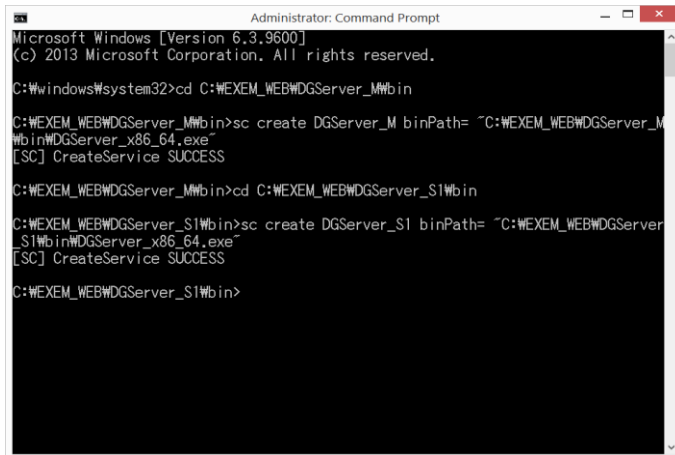
5. Create table in the Repository Database by selecting the **Install Repository** option.



6. Register the **Data Gather** Processes as services in the Command Prompt (Administrator).

```

DG Master Process:
sc create DGServer_M binPath= "{(MaxGauge Home Directory)}\Data Gather_M\bin\DGService_{bit}.exe"
DG Slave Process:
sc create DGServer_S1 binPath= "{(MaxGauge Home Directory)}\Data Gather_S1\bin\DGService_{bit}.exe"
    
```



```
Administrator: Command Prompt
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\windows\system32>cd C:\WEXEM_WEBWDGServer_M\bin

C:\WEXEM_WEBWDGServer_M\bin>sc create DGServer_M binPath= "C:\WEXEM_WEBWDGServer_M\bin\DGServer_x86_64.exe"
[SC] CreateService SUCCESS

C:\WEXEM_WEBWDGServer_M\bin>cd C:\WEXEM_WEBWDGServer_S1\bin

C:\WEXEM_WEBWDGServer_S1\bin>sc create DGServer_S1 binPath= "C:\WEXEM_WEBWDGServer_S1\bin\DGServer_x86_64.exe"
[SC] CreateService SUCCESS

C:\WEXEM_WEBWDGServer_S1\bin>
```

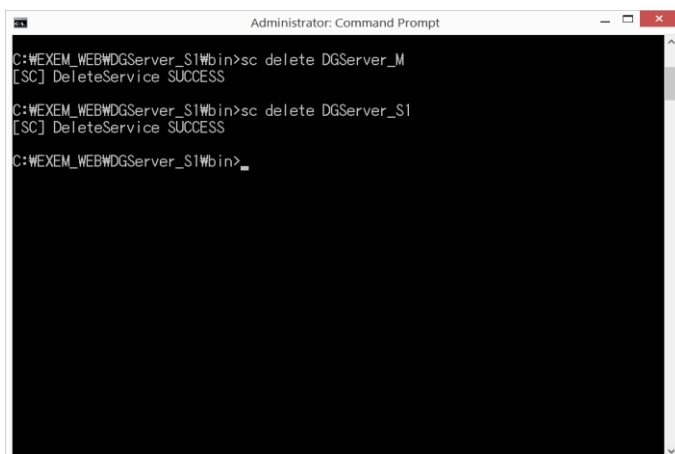
---

**Note.** Select the Bit Level file which is the same as Java (JDK).

---

7. When registered incorrectly, delete the registered service.

```
sc delete {Service Name}
```



```
Administrator: Command Prompt

C:\WEXEM_WEBWDGServer_S1\bin>sc delete DGServer_M
[SC] DeleteService SUCCESS

C:\WEXEM_WEBWDGServer_S1\bin>sc delete DGServer_S1
[SC] DeleteService SUCCESS

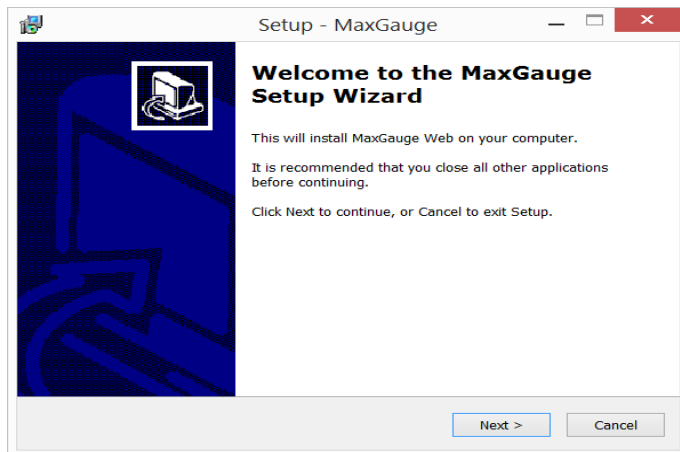
C:\WEXEM_WEBWDGServer_S1\bin>
```



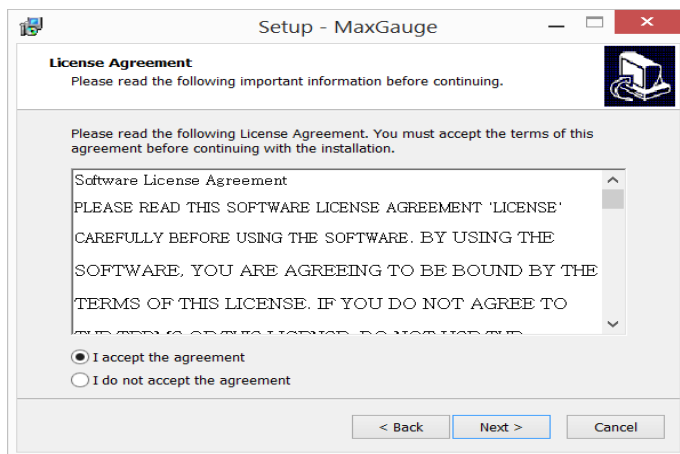
## Platform.JS Individual Installation

The **Platform.JS** installation method on Windows is as follows.

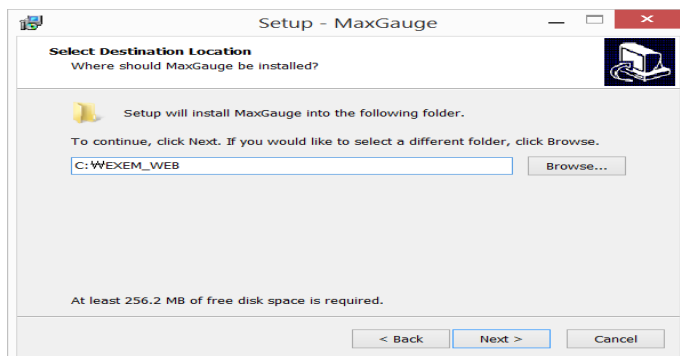
1. Click the **Next** button.



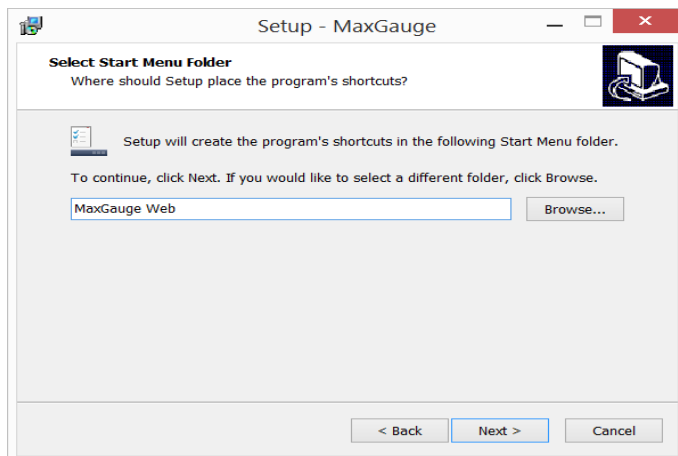
2. Click the **License Agree** button.



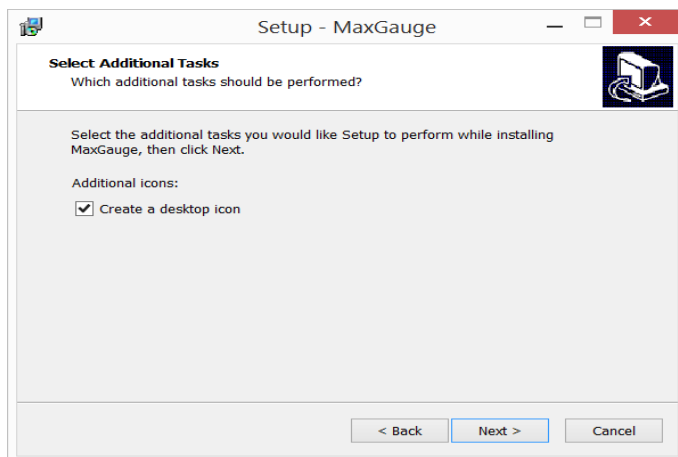
3. Select MaxGauge Home Directory.



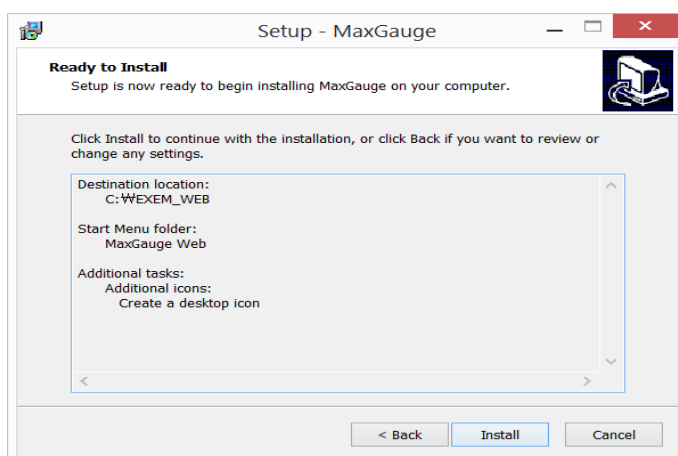
4. Select Windows Start Menu Folder name.



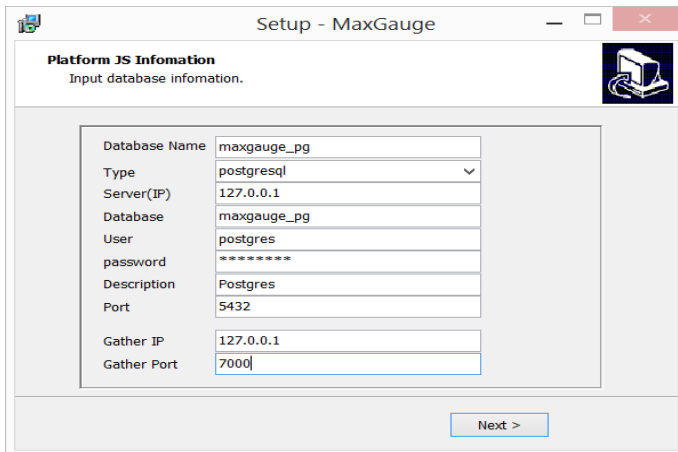
5. Choose whether to create a shortcut icon.



6. Click on the Install button to run the installation.

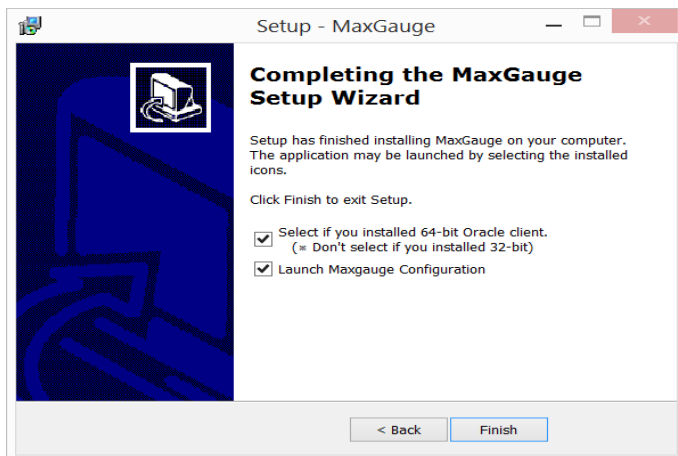


7. Enter **Data Gatherer** and Repository Database information.



Item	Description
Database Name	Alias used internally in MaxGauge.
Type	<ul style="list-style-type: none"> <li>● PostgreSQL Database: postgresql</li> </ul>
Server(IP)	<ul style="list-style-type: none"> <li>● PostgreSQL Database: Enter the IP Address of the Repository DB.</li> </ul>
Database	Set the Repository Database Name <ul style="list-style-type: none"> <li>● PostgreSQL Database: Database Name</li> </ul>
User	Set the user name of the Repository Database <ul style="list-style-type: none"> <li>● PostgreSQL Database: postgres</li> </ul>
Password	Set the user password of the Repository Database <ul style="list-style-type: none"> <li>● PostgreSQL Database: postgres</li> </ul>
Port	Set the Database Listener Port
Gather IP	Set Master DG's IP Address
Gather Port	Set Master DG's Listener Port 설정

8. Execute **Platform.JS** which is the same as the Bit of the installed Oracle Client.



---

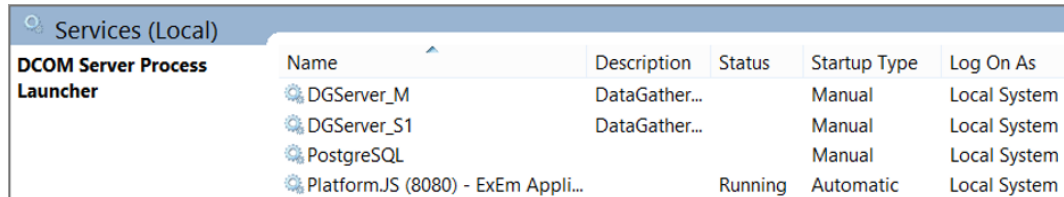
**Note.** Once installation is complete, the Platform.JS is automatically registered as a local service.

---

## Run Method

### MaxGauge Local Services

The **Platform.JS**, **Data Gatherer**, and PostgreSQL Database are automatically registered as Local Services in the installation step, and start running by executing each service in Services (Local).

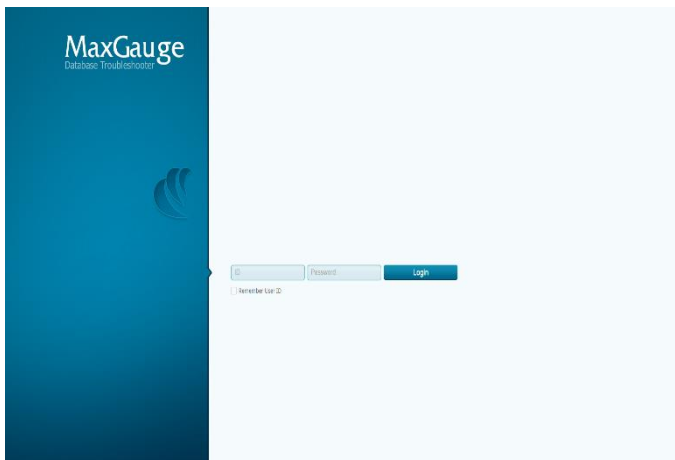


Services (Local)					
DCOM Server Process Launcher	Name	Description	Status	Startup Type	Log On As
	DGServer_M	DataGather...		Manual	Local System
	DGServer_S1	DataGather...		Manual	Local System
	PostgreSQL			Manual	Local System
	Platform.JS (8080) - ExEm Appli...		Running	Automatic	Local System

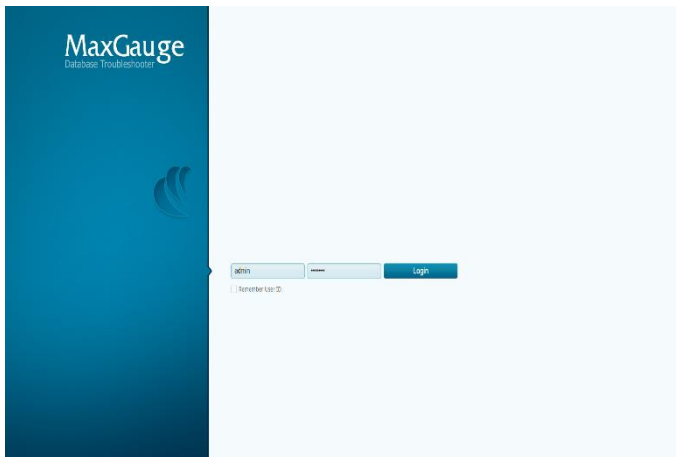
### MaxGauge Configuration

To start MaxGauge, you need to configure the required information through the **MaxGauge Configuration** . The configuration method is as follows.

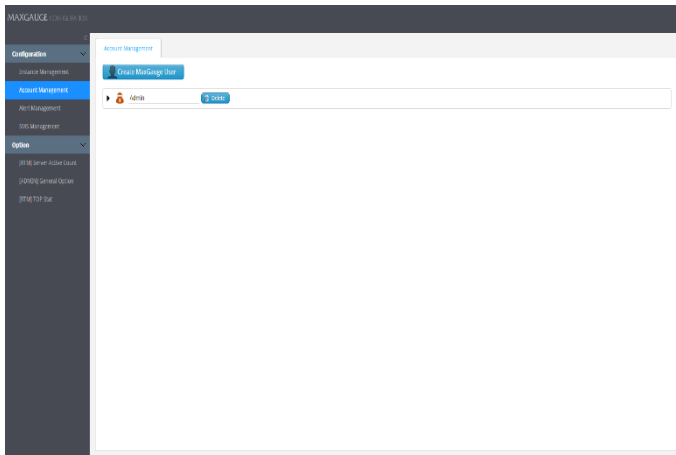
1. Connect to <http://127.0.0.1:8080/Maxgauge/> on Google Chrome.



2. Log in to the default account. (ID: admin / PW:manager)



3. Configure the Instance, Account, Alert, and SMS.



---

**Note.** For more information regarding MaxGauge Configuration, please reference "[MaxGauge Configuration Manual](#)".

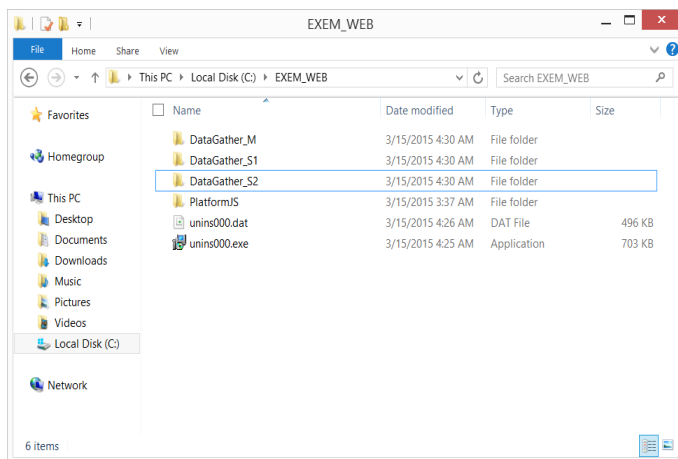
---

## User Defined Option

### Add Slave Gather Process

If you communicate with a **MaxGauge Agent Set** which has too many single **Slave DGs**, it could generate an overload. In such a case, it is necessary to add **Slave DGs**. The **Slave DG** adding method is as follows.

1. Copy the **DataGather\_S1** folder and create **DataGather\_S#** folder in the Path where MaxGauge is installed.



2. Edit the **DataGather\_S#Wconf\WDGServer.xml** file and change the **Gather\_Port**.

```

1  <?xml version="1.0" encoding="EUC-KR" ?>
2  <DataGather>
3    <DefaultOptions>
4      <master>false</master>
5      <gather_port>7002</gather_port>
6    <ClientPool>
7      <client_pool_init_size>10</client_pool_init_size>
8      <client_pool_max_size>30</client_pool_max_size>
9    </ClientPool>
10   <DBPool>
11     <database_type>postgres</database_type>
12     <database_ip>127.0.0.1</database_ip>
13     <database_port>5432</database_port>
14     <database_sid>maxgauge_pg</database_sid>
15     <database_user>postgres</database_user>
16     <database_password>postgres</database_password>
17     <connection_pool_init_size>5</connection_pool_init_size>
18     <connection_pool_max_size>10</connection_pool_max_size>
19     <sys_conn_max>2</sys_conn_max>
20     <ses_conn_max>2</ses_conn_max>
21     <oth_conn_max>2</oth_conn_max>
22     <sys10min_conn_max>1</sys10min_conn_max>
23     <sysdaily_conn_max>1</sysdaily_conn_max>
24     <sqldaily_conn_max>1</sqldaily_conn_max>
25   </DBPool>

```

3. Edit the **DataGather\_MWconfWDGServer.xml** file and add the IP address and Port number in the **Slave\_Gather\_List**.

```

1  <?xml version="1.0" encoding="EUC-KR" ?>
2  <DataGather>
3    <DefaultOptions>
4      <master>true</master>
5      <gather_port>7000</gather_port>
6      <slave_gather_list>127.0.0.1:7001, 127.0.0.1:7002</slave_gather_list>
7    <ClientPool>
8      <client_pool_init_size>10</client_pool_init_size>
9      <client_pool_max_size>30</client_pool_max_size>
10   </ClientPool>
11   <DBPool>
12     <database_type>postgres</database_type>
13     <database_ip>127.0.0.1</database_ip>
14     <database_port>5432</database_port>
15     <database_sid>maxgauge_pg</database_sid>
16     <database_user>postgres</database_user>
17     <database_password>postgres</database_password>
18     <query_timeout>0</query_timeout>
19   </DBPool>

```

4. Register **Slave DG #** as a service in the Command Prompt (Administrator).

```
sc create {Service Name} binPath= "{MaxGauge Home Directory}\{Data Gather_S#}\bin\DGService_{bit}.exe"
```

```

Administrator: Command Prompt
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\windows\system32>cd C:\WEXEM_WEB\DataGather_S2\bin

C:\WEXEM_WEB\DataGather_S2\bin>sc create DGServer_S2 binPath= "C:\WEXEM_WEB\DataGather_S2\bin\DGServer_x86_64.exe"
[SC] CreateService SUCCESS

C:\WEXEM_WEB\DataGather_S2\bin>

```

5. When registered incorrectly, delete the registered service.

```
sc delete {Service Name}
```

```

Administrator: Command Prompt
C:\WEXEM_WEB\DataGather_S2\bin>sc delete DGServer_S2
[SC] DeleteService SUCCESS

C:\WEXEM_WEB\DataGather_S2\bin>

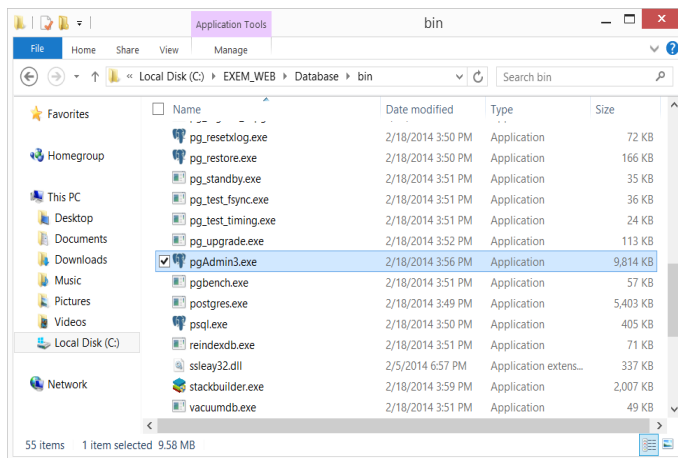
```

**Note.** Recommended number of Slave Process is (Slave 1): (MaxGauge Agent Set 10~20). However, because each Slave Process is allotted 2G memory, you must first thoroughly check the Free memory before adding it. The DG's allotted memory can be changed by editing the DGService\_{bit}.config file in each bin folder.

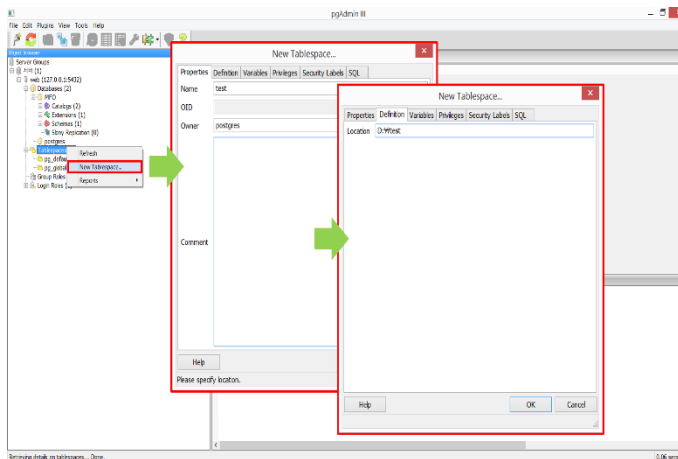
## PostgreSQL Tablespace Configuration

When the data amount storing in the PostgreSQL Repository increases, the disk may run out of space. This type of problem can be resolved by creating a separate tablespace in each table and storing in partitions.

1. Execute pgAdmin3. ({MaxGauge Home Directory}/Database/bin/pgAdmin3)

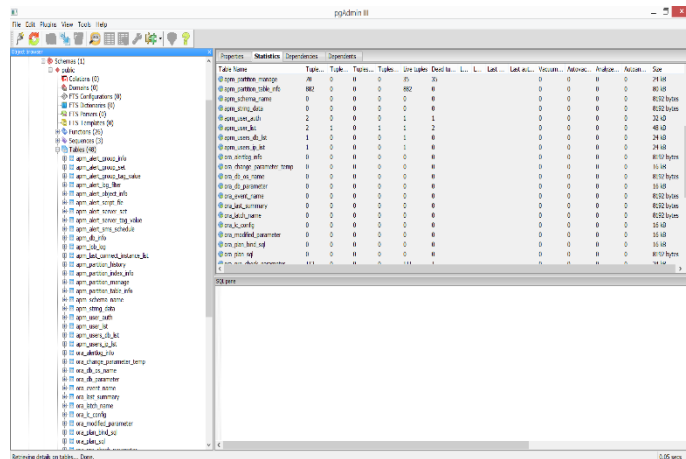


2. Create new tablespace, and enter Name/ Owner/ Path.

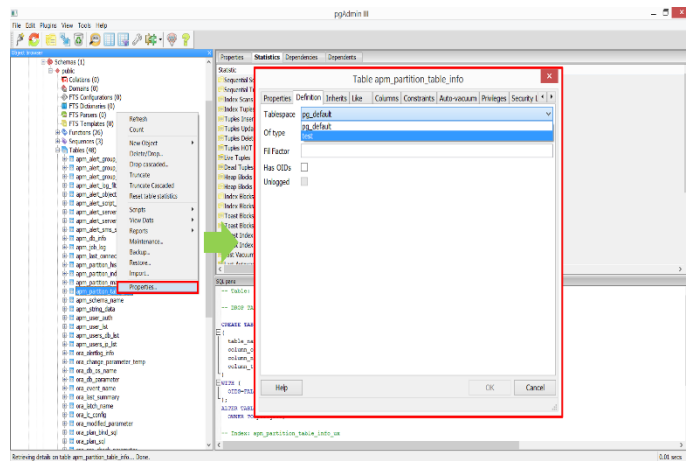




3. Check for tables with high volume.



4. Assign the tablespace created in the table individually.



**Note.** The data save cycle can be changed in MaxGauge Configuration. For more information, please reference [“MaxGauge Configuration Manual”](#).

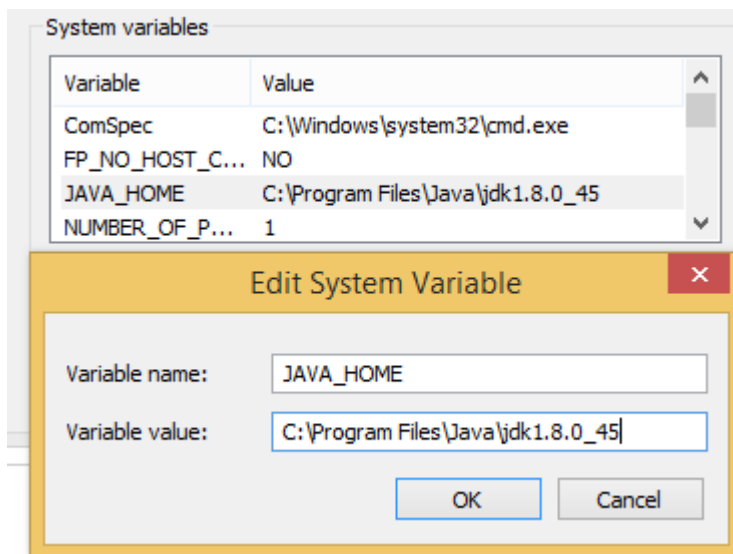
# Oracle Repository (Windows based)

## Advance Preparation

### Java (JDK 1.8 or higher)

Install Java in the same server as the **Data Gatherer**. The installation method is as follows.

1. Download and install JDK.
2. Create JAVA\_HOME environment variable.




---

**Note.** In general, Java is installed the same as the Bit Level of the installed OS.

---

## Installation Process (Manual)

### Oracle Individual Installation

In this Install Guide, we will not discuss the details regarding the Oracle Database installation. For more information information about the corresponding DB installation, please reference the Oracle's official Install Guide.

### Repository Maxgauge User Configuration

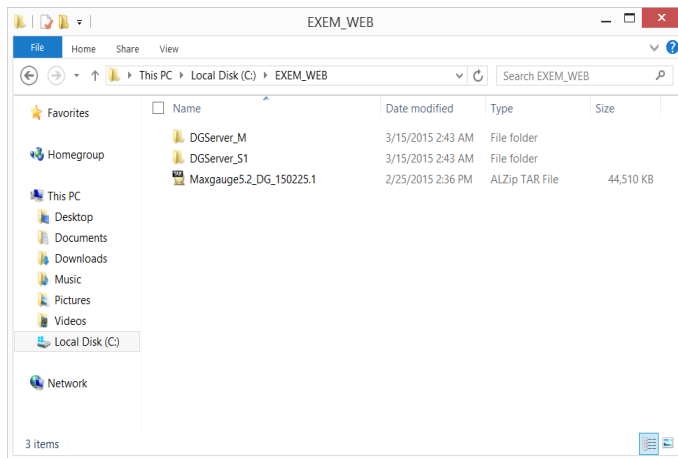
The Repository DB's Maxgauge User's privileges are as follows.

```
# sys or dba User
SQL> GRANT RESOURCE TO maxgauge;
SQL> GRANT CONNECT TO maxgauge;
SQL> GRANT CREATE SESSION TO maxgauge;
SQL> GRANT CREATE DATABASE LINK TO maxgauge;
SQL> GRANT SELECT_CATALOG_ROLE TO maxgauge;
```

```
SQL> GRANT SELECT ANY TABLE TO maxgauge;  
SQL> GRANT CREATE ANY PROCEDURE TO maxgauge;  
SQL> GRANT EXECUTE ON SYS.DBMS_SESSION TO maxgauge;  
SQL> GRANT EXECUTE ON SYS.DBMS_SYSTEM TO maxgauge;  
SQL> GRANT EXECUTE ON DBMS_LOCK TO maxgauge;  
SQL> GRANT ALTER SESSION TO maxgauge;  
SQL> GRANT ALTER SYSTEM TO maxgauge;  
SQL> GRANT SELECT ANY DICTIONARY TO maxgauge;
```

## Data Gatherer Individual Installation (Windows based)

1. Unzip the **MaxGauge5.2\_DG.tar** file in MaxGauge installation path.



2. Edit the **Data Gather\_S1/conf/ DGServer.xml** file's parameter configuration.

```

1  <?xml version="1.0" encoding="EUC-KR"?>
2  <DataGather>
3      <DefaultOptions>
4          <master>false</master>
5          <gather_port>7001</gather_port>
6          <ClientPool>
7              <client_pool_init_size>10</client_pool_init_size>
8              <client_pool_max_size>30</client_pool_max_size>
9          </ClientPool>
10         <DBPool>
11             <database_type>oracle</database_type>
12             <database_ip>127.0.0.1</database_ip>
13             <database_port>1521</database_port>
14             <database_sid>maxgauge_oracle</database_sid>
15             <database_user>maxgauge</database_user>
16             <database_password>maxgauge</database_password>
17             <connection_pool_init_size>5</connection_pool_init_size>
18             <connection_pool_max_size>10</connection_pool_max_size>
19             <sys_conn_max>2</sys_conn_max>
20             <ses_conn_max>2</ses_conn_max>
21             <oth_conn_max>2</oth_conn_max>
22             <sys10min_conn_max>1</sys10min_conn_max>
23             <sysdaily_conn_max>1</sysdaily_conn_max>
24             <sqldaily_conn_max>1</sqldaily_conn_max>
25         </DBPool>
26         <DatabaseType_Oracle>
27             <commit_write></commit_write>

```

Parameter Name	Description
database_type	Set the Repository's database type. <ul style="list-style-type: none"> <li>● Oracle Database: oracle</li> </ul>
database_ip	Set the IP of the Repository Database to be connected to JDBC. <ul style="list-style-type: none"> <li>● Default Value: 127.0.0.1</li> </ul>
database_port	Set the Repository Database port to be connected to JDBC. <ul style="list-style-type: none"> <li>● Default Value: 1521</li> </ul>
database_sid	Set the Repository Database name to be connected to JDBC. <ul style="list-style-type: none"> <li>● Oracle Database: SID Name</li> </ul>
database_user	Set the user name of the Repository Database to be connected to JDBC. <ul style="list-style-type: none"> <li>● Oracle Database: maxgauge</li> </ul>
database_password	Set the user password of the Repository Database to be connected to JDBC.

	<ul style="list-style-type: none"> <li>● Oracle Database: maxgauge</li> </ul>
commit_write	<p>Set DG Slave Process' Commit Method (10gR2 or higher)</p> <ul style="list-style-type: none"> <li>● Default Setting Value: Follow the Oracle Default Setting Value (IMMEDIATE, WAIT)</li> </ul> <p>For information on parameters, reference the Oracle document.  <a href="http://docs.oracle.com/cd/B19306_01/server.102/b14237/initparams027.htm#REFRN10260">http://docs.oracle.com/cd/B19306_01/server.102/b14237/initparams027.htm#REFRN10260</a></p>

3. Edit the **Data Gather\_M/conf/DGServer.xml** file's parameter configuration.

```

1  <?xml version="1.0" encoding="EUC-KR"?>
2  <DataGather>
3      <DefaultOptions>
4          <master>true</master>
5          <gather_port>7000</gather_port>
6          <slave_gather_list>127.0.0.1:7001</slave_gather_list>
7      <ClientPool>
8          <client_pool_init_size>10</client_pool_init_size>
9          <client_pool_max_size>30</client_pool_max_size>
10     </ClientPool>
11     <DBPool>
12         <database_type>oracle</database_type>
13         <database_ip>127.0.0.1</database_ip>
14         <database_port>1521</database_port>
15         <database_sid>maxgauge_oracle</database_sid>
16         <database_user>maxgauge</database_user>
17         <database_password>maxgauge</database_password>
18         <query_timeout>0</query_timeout>
19     </DBPool>
20     <DatabaseType_Oracle>
21         <tablespace>maxgauge_tbs</tablespace>
22         <index_tablespace>maxgauge_idx_tbs</index_tablespace>
23         <partition>true</partition>
24         <compress_partition>true</compress_partition>
25     </DatabaseType_Oracle>
26 </DefaultOptions>

```

Parameter Name	Description
slave_gather_list	<p>Set the Slave DG List.</p> <ul style="list-style-type: none"> <li>● IP: Configured in a port format. Use a comma ',' to add a slave. ex) 127.0.0.1:7001,127.0.0.1:7002</li> </ul>
database_type	<p>Set the Repository's Database type.</p> <ul style="list-style-type: none"> <li>● Oracle Database: oracle</li> </ul>
database_ip	<p>Set the IP of the Repository Database to be connected to JDBC.</p>
database_port	<p>Set the Repository Database Port to be connected to JDBC.</p> <ul style="list-style-type: none"> <li>● Default Value: 1521</li> </ul>
database_sid	<p>Set the Repository Database name to be connected to JDBC.</p> <ul style="list-style-type: none"> <li>● Oracle Database: SID Name</li> </ul>
database_user	<p>Set the user name of the Repository Database to be connected to JDBC.</p> <ul style="list-style-type: none"> <li>● Oracle Database: maxgauge</li> </ul>
database_password	<p>Set the user password of the Repository Database to be connected to JDBC.</p> <ul style="list-style-type: none"> <li>● Oracle Database: maxgauge</li> </ul>
tablespace	<p>Tablespace Name which will create a Repository Table.</p>
index_tablespac	<p>Tablespace Name which will create an index in the Repository Table.</p>

4. Execute the **Data Gather\_M/bin/dginstall.bat** file in the Command Prompt (Administrator).

```

Administrator: Command Prompt
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\windows\system32>cd C:\WEXEM_WEBWDGServer_M\bin
C:\WEXEM_WEBWDGServer_M\bin>dgininstall

```

5. Select the **Install Repository** option to create a table in the Repository Database.

```

Administrator: Command Prompt - dgininstall
C:\WEXEM_WEBWDGServer_M\bin>dgininstall
C:\WEXEM_WEBWDGServer_M\bin>java -jar DGServer.jar install
DataGather for MaxGauge5.2 Version 1.0.0.0 (build 2015.03.08.1)
===== DataGather Install Menu =====
1. Install Repository
2. Remove Repository
3. Upgrade Maxgauge5.0 to Maxgauge5.1
4. Upgrade Maxgauge5.1 to Maxgauge5.2
0. Exit
SELECT>1

```

6. Register the **Data Gather** Processes as services in the Command Prompt (Administrator).

DG Master Process:

```
sc create DGServer_M binPath= "{MaxGauge Home Directory}\Data Gather_M\bin\DGService_{bit}.exe"
```

DG Slave Process:

```
sc create DGServer_S1 binPath= "{MaxGauge Home Directory}\Data Gather_S1\bin\DGService_{bit}.exe"
```

```

Administrator: Command Prompt
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\windows\system32>cd C:\WEXEM_WEBWDGServer_M\bin
C:\WEXEM_WEBWDGServer_M\bin>sc create DGServer_M binPath= "C:\WEXEM_WEBWDGServer_M\bin\DGServer_x86_64.exe"
[SC] CreateService SUCCESS

C:\WEXEM_WEBWDGServer_M\bin>cd C:\WEXEM_WEBWDGServer_S1\bin
C:\WEXEM_WEBWDGServer_S1\bin>sc create DGServer_S1 binPath= "C:\WEXEM_WEBWDGServer_S1\bin\DGServer_x86_64.exe"
[SC] CreateService SUCCESS

C:\WEXEM_WEBWDGServer_S1\bin>

```

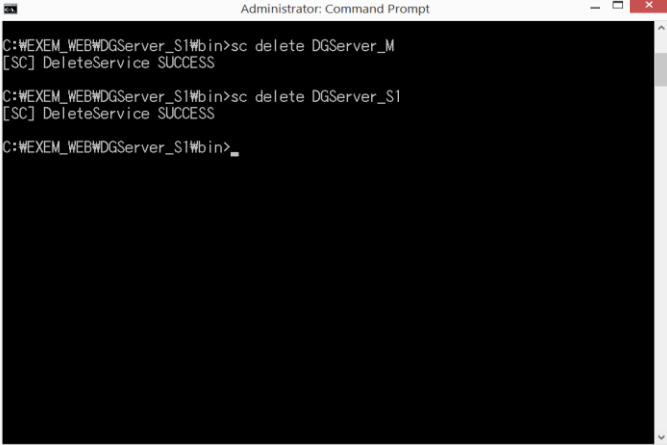
---

**Note.** Select the Bit Level file which is the same as Java(JDK).

---

7. When registered incorrectly, delete the registered service.

sc delete {Service Name}

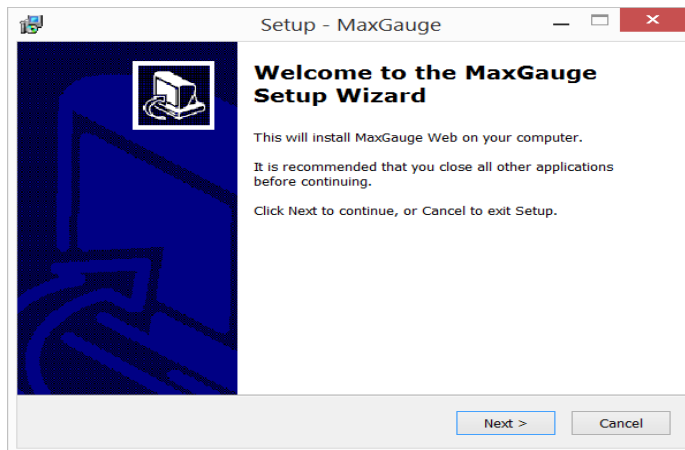


```
Administrator: Command Prompt
C:\WEXEM_WEBWDGServer_S1\bin>sc delete DGServer_M
[SC] DeleteService SUCCESS
C:\WEXEM_WEBWDGServer_S1\bin>sc delete DGServer_S1
[SC] DeleteService SUCCESS
C:\WEXEM_WEBWDGServer_S1\bin>
```

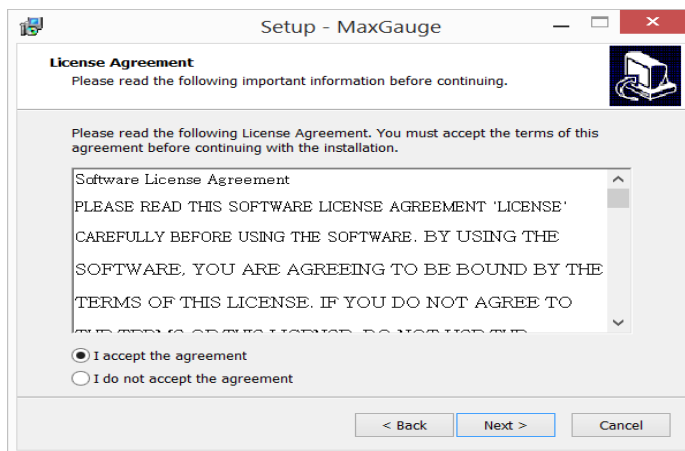
## Platform.JS Individual Installation (Windows based)

The **Platform.JS** installation method on Windows is as follows.

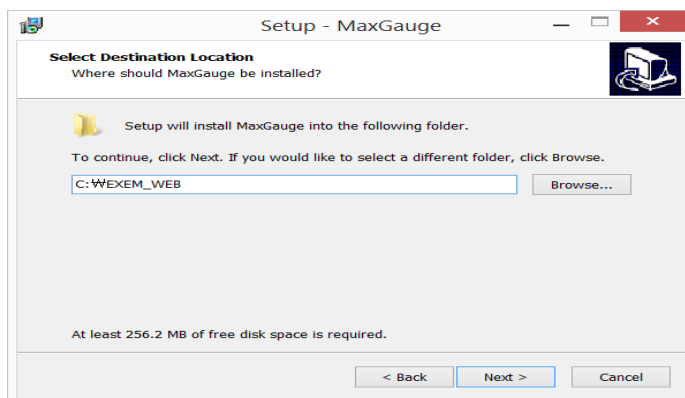
1. Click the **Next** button.



2. Click the **License Agree** button.

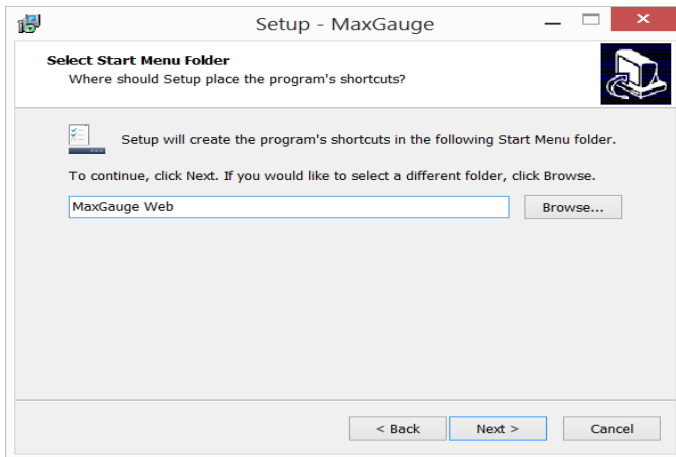


3. Select the MaxGauge Home Directory.

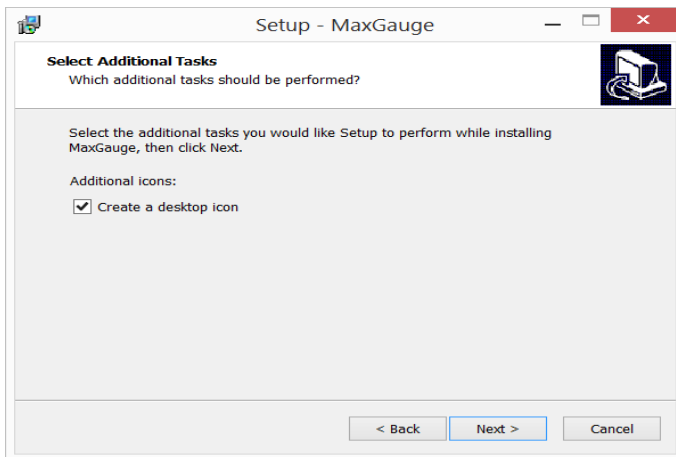




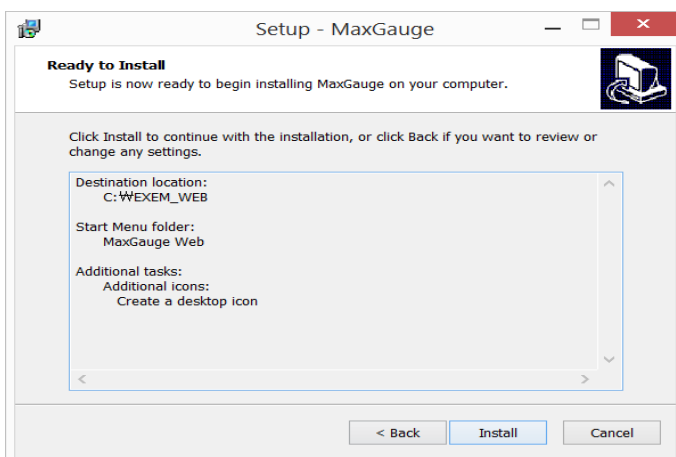
4. Select the Windows Start Menu Folder Name.



5. Choose whether to create a shortcut icon.



6. Click on the **Install** button to run the installation.



7. Enter the **Data Gatherer** and Repository Database information.

The screenshot shows a window titled "Setup - MaxGauge" with a sub-header "Platform JS Information" and the instruction "Input database information." The form contains the following fields:

- Database Alias: maxgauge\_oracle
- TNS Name: ORCL
- User: maxgauge
- password: [masked]
- Description: Oracle
- Gather IP: 0.0.0.0
- Gather Port: 7000

A "Next >" button is located at the bottom right of the form.

Item	Description
Database Alias	Set the Repository Database Name. <ul style="list-style-type: none"> <li>● Oracle Database: SID Name</li> </ul>
TNS Name	Oracle Database: Enter the Repository DB's TNS Alias.
User	Set the user name of the Repository Database. <ul style="list-style-type: none"> <li>● Oracle Database: maxgauge</li> </ul>
Password	Set the password of the Repository Database. <ul style="list-style-type: none"> <li>● Oracle Database: maxgauge</li> </ul>
Gather IP	Set the Master DG's IP Address.
Gather Port	Set the Master DG's Listener Port.

8. Select the **Platform.JS** which is the same as the Bit Level of the installed Oracle Client, and execute **MaxGauge Configuration**.

**Note.** Once installation is complete, the Platform.JS is automatically registered as a local service.

## Run Method

### MaxGauge Local Services

The **Platform.JS** and **Data Gatherer** are automatically registered as Local Services in the installation step, and start running by executing each service in Services (Local).

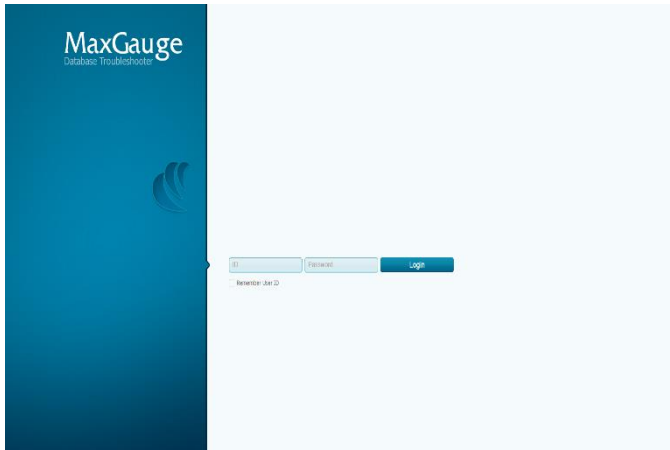
The screenshot shows the Windows Services console with the "Services (Local)" window open. The "Network Connected Devices Auto-Setup" section is expanded, showing a list of services:

Name	Description	Status	Startup Type	Log On As
Exem_DGServer_OBS_M		Running	Automatic	Local System
Exem_DGServer_OBS_S1		Running	Automatic	Local System
Exem_PlatformJS(8080)		Running	Automatic	Local System
Exem_PlatformJS_OBS(80...		Running	Automatic	Local System
Exem_PostgreSQL(5432)		Running	Automatic	Local System

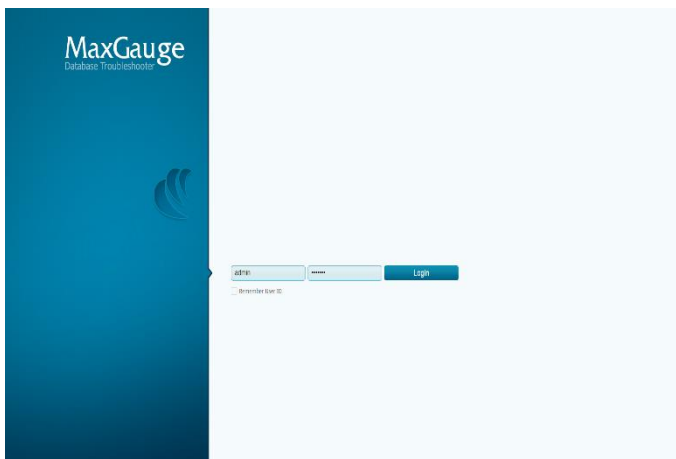
## MaxGauge Configuration

To start MaxGauge, configure the required information through **MaxGauge Configuration**. The configuration method is as follows.

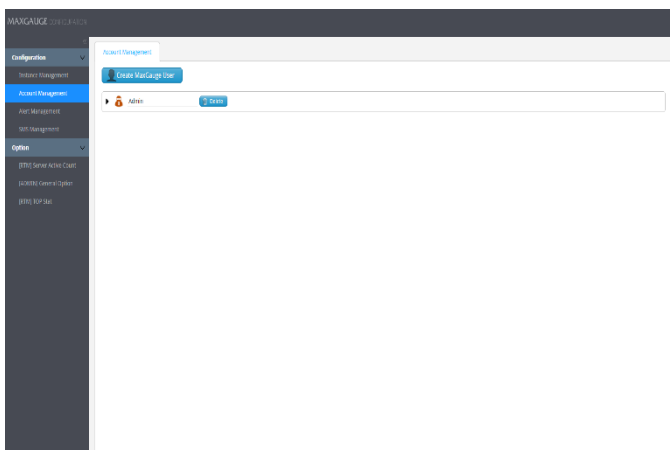
1. Connect to <http://127.0.0.1:8080/Maxgauge/Config> on Google Chrome.



2. Log in to the default account. (ID: admin / PW: manager)



3. Configure the Instance, Account, Alert, and SMS.



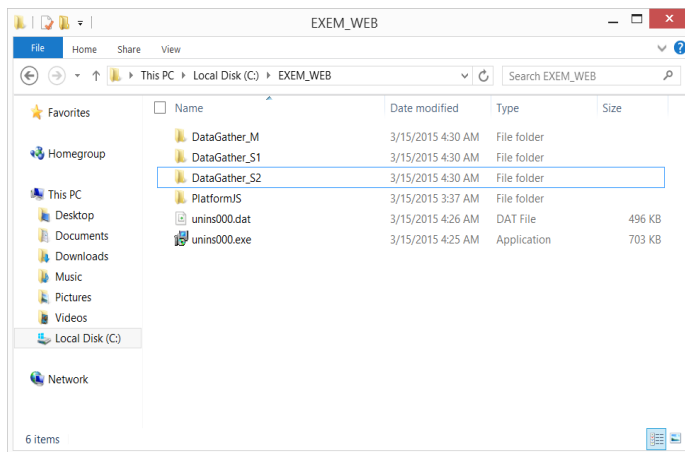
**Note.** For more information regarding MaxGauge Configuration, please reference “[MaxGauge Configuration Manual](#)”.

## User Defined Option

### Add Slave Gather Process

If you communicate with a **MaxGauge Agent Set** which has too many single **Slave DGs**, it could generate an overload. In such a case, it is necessary to add **Slave DGs**. The **Slave DG** adding method is as follows.

1. Copy the **DataGather\_S1** folder and create **DataGather\_S#** folder in the Path where MaxGauge is installed.



2. Edit the **DataGather\_S#confDGServer.xml** file and change the **Gather\_Port**.

```

1  <?xml version="1.0" encoding="EUC-KR"?>
2  <DataGather>
3    <DefaultOptions>
4      <master>false</master>
5      <gather_port>7002</gather_port>
6    </DefaultOptions>
7    <ClientPool>
8      <client_pool_init_size>10</client_pool_init_size>
9      <client_pool_max_size>30</client_pool_max_size>
10   </ClientPool>
11   <DBPool>
12     <database_type>postgres</database_type>
13     <database_ip>127.0.0.1</database_ip>
14     <database_port>5432</database_port>
15     <database_sid>maxgauge_pg</database_sid>
16     <database_user>postgres</database_user>
17     <database_password>postgres</database_password>
18     <connection_pool_init_size>5</connection_pool_init_size>
19     <connection_pool_max_size>10</connection_pool_max_size>
20     <sys_conn_max>2</sys_conn_max>
21     <ses_conn_max>2</ses_conn_max>
22     <oth_conn_max>2</oth_conn_max>
23     <sys10min_conn_max>1</sys10min_conn_max>
24     <sysdaily_conn_max>1</sysdaily_conn_max>
25     <sqldaily_conn_max>1</sqldaily_conn_max>
26   </DBPool>
27 </DataGather>

```

3. Edit the `DataGather_M\conf\DGServer.xml` file and add the IP address and Port number in the `Slave_Gather_List`.

```

1  <?xml version="1.0" encoding="EUC-KR" ?>
2  <DataGather>
3    <DefaultOptions>
4      <master>true</master>
5      <gather_port>7000</gather_port>
6      <slave_gather_list>127.0.0.1:7001, 127.0.0.1:7002</slave_gather_list>
7    <ClientPool>
8      <client_pool_init_size>10</client_pool_init_size>
9      <client_pool_max_size>30</client_pool_max_size>
10   </ClientPool>
11   <DBPool>
12     <database_type>postgres</database_type>
13     <database_ip>127.0.0.1</database_ip>
14     <database_port>5432</database_port>
15     <database_sid>maxgauge_pg</database_sid>
16     <database_user>postgres</database_user>
17     <database_password>postgres</database_password>
18     <query_timeout>0</query_timeout>
19   </DBPool>

```

4. Register **Slave DG #** as a service in the Command Prompt (Administrator).

```
sc create {Service Name} binPath= "{(MaxGauge Home Directory)}\{Data Gather_S#}\bin\DGService_{bit}.exe"
```

```

Administrator: Command Prompt
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\windows\system32>cd C:\WEXEM_WEB\DataGather_S2\bin

C:\WEXEM_WEB\DataGather_S2\bin>sc create DGServer_S2 binPath= "C:\WEXEM_WEB\DataGather_S2\bin\DGServer_x86_64.exe"
[SC] CreateService SUCCESS

C:\WEXEM_WEB\DataGather_S2\bin>_

```

5. When registered incorrectly, delete the registered service.

```
sc delete {Service Name}
```

```

Administrator: Command Prompt
C:\WEXEM_WEB\DataGather_S2\bin>sc delete DGServer_S2
[SC] DeleteService SUCCESS

C:\WEXEM_WEB\DataGather_S2\bin>_

```

---

**Note.** Recommended number of Slave Process is (Slave 1): (MaxGauge Agent Set 10~20). However, because each Slave Process is allotted **3GB memory**, you must first thoroughly check the Free memory before adding it. The DG's allotted memory can be changed by editing the DGService\_{bit}.config file in each bin folder.

---

## Oracle Repository (Unix/Linux based)

### Advance Preparation

#### Java (JDK 1.8 or higher)

Install Java in the same server as the **Data Gatherer**. The installation method is as follows.

1. Download JDK and unzip the file.

<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

---

**Note.** For Unix/Linux, consult with an OS engineer before running the job.

---

2. Designate JAVA\_HOME and the Path to maxgauge user's .profile.

```
export JAVA_HOME= {Java Home Directory}
export Path= $JAVA_HOME/bin
```

3. Apply the .profile.

```
$ source $HOME/.profile
```

## Installation Process (Manual)

### Oracle Individual Installation

In this Install Guide, we will not discuss the details regarding the Oracle Database installation. For more information about the corresponding DB installation, please reference the Oracle's official Install Guide.

#### Repository maxgauge user Configuration

The Repository DB's Maxgauge User's required privileges are as follows.

```
# sys or dba User
SQL> GRANT RESOURCE TO maxgauge;
SQL> GRANT CONNECT TO maxgauge;
SQL> GRANT CREATE SESSION TO maxgauge;
SQL> GRANT CREATE DATABASE LINK TO maxgauge;
SQL> GRANT SELECT_CATALOG_ROLE TO maxgauge;
```

```
SQL> GRANT SELECT ANY TABLE TO maxgauge;
SQL> GRANT CREATE ANY PROCEDURE TO maxgauge;
SQL> GRANT EXECUTE ON SYS.DBMS_SESSION TO maxgauge;
SQL> GRANT EXECUTE ON SYS.DBMS_SYSTEM TO maxgauge;
SQL> GRANT EXECUTE ON DBMS_LOCK TO maxgauge;
SQL> GRANT ALTER SESSION TO maxgauge;
SQL> GRANT ALTER SYSTEM TO maxgauge;
SQL> GRANT SELECT ANY DICTIONARY TO maxgauge;
```

## Data Gatherer Individual Installation

1. Unzip the [MFO5.3] [DataGather] [ Build date].tar file in the MaxGauge installation path.

```
$ tar -xvf [MFO5.3]_[DataGather]_[ Build date].tar
```

2. Edit the **Data Gather\_S1/conf/ DGServer.xml** file's parameter configuration.

```
$ vi Data Gather_S1/conf/ DGServer.xml
```

```
<?xml version="1.0" encoding="EUC-KR"?>
<DataGather>
  <DefaultOptions>
    <master>false</master>
    <gather_port>7001</gather_port>
    <ClientPool>
      <client_pool_init_size>10</client_pool_init_size>
      <client_pool_max_size>30</client_pool_max_size>
    </ClientPool>
    <DBPool>
      <database_type>oracle</database_type>
      <database_ip>127.0.0.1</database_ip>
      <database_port>1521</database_port>
      <database_sid>ORCL</database_sid>
      <database_user>maxgauge</database_user>
      <database_password>maxgauge</database_password>
      <connection_pool_init_size>5</connection_pool_init_size>
      <connection_pool_max_size>10</connection_pool_max_size>
      <sys_conn_max>2</sys_conn_max>
      <ses_conn_max>2</ses_conn_max>
      <oth_conn_max>2</oth_conn_max>
      <sys10min_conn_max>1</sys10min_conn_max>
      <sysdaily_conn_max>1</sysdaily_conn_max>
      <sqldaily_conn_max>1</sqldaily_conn_max>
    </DBPool>
    <DatabaseType_Oracle>
      <commit_write></commit_write>
```

Parameter Name	Description
database_type	Set the Repository's Database type. <ul style="list-style-type: none"> <li>● Oracle Database: oracle</li> </ul>
database_ip	Set the IP of the Repository Database to be connected to JDBC. <ul style="list-style-type: none"> <li>● Default Value: 127.0.0.1</li> </ul>
database_port	Set the Repository Database Port to be connected to JDBC. <ul style="list-style-type: none"> <li>● Default Value: 1521</li> </ul>
database_sid	Set the name of the Repository Database to be connected to JDBC. <ul style="list-style-type: none"> <li>● Oracle Database: SID Name</li> </ul>
database_user	Set the user name of the Repository Database to be connected to JDBC. <ul style="list-style-type: none"> <li>● Oracle Database: maxgauge</li> </ul>
database_password	Set the user password of the Repository Database to be connected to JDBC.

	<ul style="list-style-type: none"> <li>● Oracle Database: maxgauge</li> </ul>
commit_write	<p>Set the DG Slave Process' Commit Method (10gR2 or higher)</p> <ul style="list-style-type: none"> <li>● Default Setting Value: Follow the Oracle Default Setting Value (IMMEDIATE, WAIT)</li> </ul> <p>For information about parameters, please reference the Oracle document.  <a href="http://docs.oracle.com/cd/B19306_01/server.102/b14237/initparams027.htm#REFRN10260">http://docs.oracle.com/cd/B19306_01/server.102/b14237/initparams027.htm#REFRN10260</a></p>

### 3. Edit the **Data Gather\_M/conf/DGServer.xml** file's parameter configuration.

```
# vi Data Gather_M/conf/ DGServer.xml
```

```
<?xml version="1.0" encoding="EUC-KR"?>
<DataGather>
  <DefaultOptions>
    <master>true</master>
    <gather_port>7000</gather_port>
    <slave_gather_list>127.0.0.1:7001</slave_gather_list>
    <ClientPool>
      <client_pool_init_size>10</client_pool_init_size>
      <client_pool_max_size>30</client_pool_max_size>
    </ClientPool>
    <DBPool>
      <database_type>oracle</database_type>
      <database_ip>127.0.0.1</database_ip>
      <database_port>1521</database_port>
      <database_sid>ORCL</database_sid>
      <database_user>maxgauge</database_user>
      <database_password>maxgauge</database_password>
      <query_timeout>0</query_timeout>
    </DBPool>
    <DatabaseType_Oracle>
      <tablespace>MAXGAUGE_TBS</tablespace>
      <index_tablespace>MAXGAUGE_IDX_TBS</index_tablespace>
    </DatabaseType_Oracle>
  </DefaultOptions>
</DataGather>
```

Parameter Name	Description
slave_gather_list	<p>Set the Slave DG List.</p> <ul style="list-style-type: none"> <li>● IP: Configured in a port format. Use a comma ',' to add a slave. ex) 127.0.0.1:7001,127.0.0.1:7002</li> </ul>
database_type	<p>Set the Repository's Database type.</p> <ul style="list-style-type: none"> <li>● Oracle Database: oracle</li> </ul>
database_ip	Set the IP of the Repository Database to be connected to JDBC.
database_port	Set the Repository Database Port to be connected to JDBC.
database_sid	<p>Set the name of the Repository Database to be connected to JDBC.</p> <ul style="list-style-type: none"> <li>● Oracle Database: SID Name</li> </ul>
database_user	<p>Set the user name of the Repository Database to be connected to JDBC.</p> <ul style="list-style-type: none"> <li>● Oracle Database: maxgauge</li> </ul>
database_password	<p>Set the user password of the Repository Database to be connected to JDBC.</p> <ul style="list-style-type: none"> <li>● Oracle Database: maxgauge</li> </ul>
tablespace	Tablespace Name which will create the Repository Table.
index_tablespace	Tablespace Name which will create an index in the Repository Table.



4. Execute **Data Gather\_M/bin/dginstall.sh** file.

```
$.dginstall.sh
```

5. Select the **Install Repository** option and create a table in the Repository Database.
6. Start the **Data Gather** Process by using the **dgboot** command in the **Data Gather\_M/bin** and **Data Gather\_S1/bin**.

```
$.dgboot
```

7. Check to confirm that **Data Gather** Processes are running properly.

```
$.ps -ef | grep DG
```

---

**Note.** If you find the DG Process is malfunctioning, stop the DG Process by using the **dgdown** command.

---

## PlatformJS Individual Installation (Unix/Linux based)

Be released after August 2016/08 New Java PlatformJS supports the Oracle / PostgreSQL Repository, and you can select repository and change settings through install.sh.

From version 5.3.2 and requires Java 1.8 or later.

### 1. Installation File Upload

To install PlatformJS in a Linux environment, the following installation files are required and you need to upload these files in a binary format.

File Name	Description
[MFO5.3]_[PlatformJS]_[File Ver].tar	PlatformJS installation file.

#### Example

Ex) OS : Linux

```
FTP> put MFO5.3_PlatformJS_Linux_160221.tar
```

### 2. Installation File Unzip

Unzip the the uploaded files in the maxgauge user home directory. The unzip method is as follows.

```
$ unzip [MFO5.3]_[PlatformJS]_[File Ver].zip
```

#### Example

```
$ unzip [MFO5.3]_[PlatformJS]_[160810].zip
```

### 3. Run Install Script

Uncompress and use the configuration.bat inside to enter the information for the Repository DB to perform the silent installation. Depending on the type of Repository DB, there are some differences in the input items. Input values are as follows.

the first Menu is the description of each option

Option	Description
1. Configurations .	Set the value in the config.json file for PlatformJS startup.
2. SSL Settings ( Current state : Disabled )	Set the setting value when using SSL
3. Port Settings ( Current port: 8080 )	Used to change the PlatformJS Http Service port.
4. Log Settings	Used to change the PlatformJS Log option
5. Exit	Exit the Install Helper

## Configurations option

항 목	설 명
DataGather IP	Master DataGather installer environment IP
DataGather Port	Master DataGather Port
Repository DB Type	Repository DB type(1 : PostgreSQL / 2 : Oracle)
Database Server	Repository DB IP
Database Port	Repository DB Port
Database Name	Port information assigned to the DataGather
Database User	Repository DB user name
Database Password	Repository DB user password
Service Port	Port to be used by PlatformJS

**Example**

```

$ sh configuration.bat
=====
PlatformJS Configuration
=====
1 : Configurations
2 : SSL Settings ( Current state : Disabled )
3 : Port Settings ( Current port: 8080 )
4 : Log Settings
0 : Exit
Select Number :1
=====
Configurations
=====

Step 1. DataGather IP [ Default : 127.0.0.1 ] < BACK : 0 >
Input Text :
127.0.0.1

Step 2. DataGather Port [ Default : 7000 ] < BACK : 0 >
Input Text :
7000

Step 3. Repository DB Type [ Default (1)PostgreSQL ] < BACK : 0 >
1.PostgreSQL
2.Oracle

Select Number : 2
Oracle

```

Step 4. Database Server [ Default : 127.0.0.1 ] < BACK : 0 >

Input Text :

127.0.0.1

Step 5. Database Port [ Default : 1521 ] < BACK : 0 >

Input Text :

1521

Step 6. Database Name [ Deault : MFO ] < BACK : 0 >

Input Text : DEVQA21

Step 7. Database User [ Default : maxgauge ] < BACK : 0 >

Input Text : c##maxgauge

Step 8. Database Password [ Default : maxgauge ] < BACK : 0 >

Input Text : maxgauge

Step 9. Service Port [ Default : 8080 ] < BACK : 0 >

Input Text :

8080

=====

Confirm

=====

Datagather IP : 127.0.0.1  
 Datagather Port : 7000  
 Database Type : Oracle  
 Database Server : 127.0.0.1  
 Database Port : 1521  
 Database Name : DEVQA21  
 Database User : c##maxgauge  
 Database Password : maxgauge  
 Service Port : 8080

Do you want to save? 1.Save 2.Cancel [ Default (1)Save ]

Select Number : 1

### Saved ###

press any key to continue.

=====

PlatformJS Configuration

=====

1 : Configurations  
 2 : SSL Settings ( Current state : Disabled )  
 3 : Port Settings ( Current port: 8080 )  
 4 : Log Settings

```
0 : Exit
```

```
Select Number :0
```

## Java PlatformJS run method

If you want run configuration.bat from the extracted folder

The platformjs.start.sh, platformjs.stop.sh shell files are created and you can control the behavior of PlatformJS using these files.

How to use is as follows

PlatformJS start

```
$ sh platformjs.start.sh
PlatformJS
Select the operation mode you wish to perform.

1. Release Mode ( background execution )
2. Debug Mode ( Console execution )

Choose Mode (Enter Key. Default '1') :
```

## operation descriptong

Operation	Description
1. Release Mode ( background execution )	Start PlatformJS as a background process
2. Debug Mode ( Console execution )	Start PlatformJS by hanging into that session (You can check the log.)

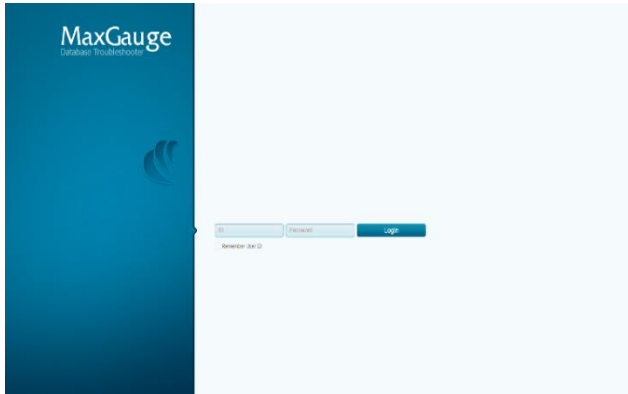
PlatformJS stop

```
$ sh platformjs.stop.sh
Waiting 10 seconds for jetty to stop
WARNING: Server reports itself as Stopped
```

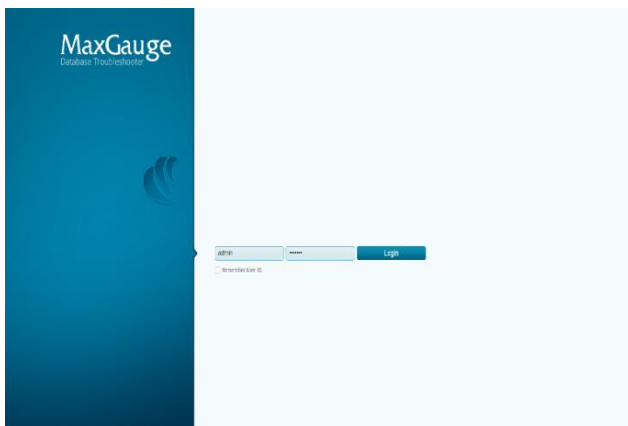
## MaxGauge Configuration

To start MaxGauge, set the required information in **MaxGauge Configuration**. For settings, follow the steps below.

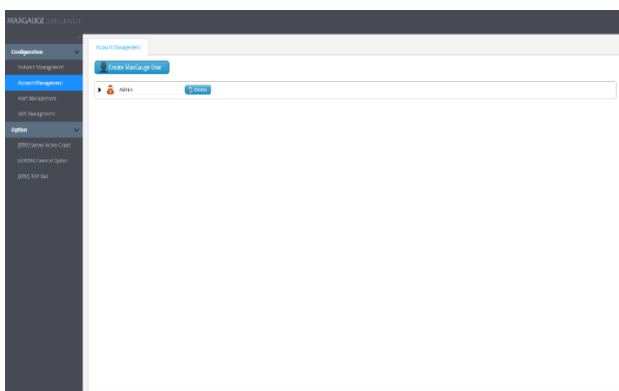
1. On Google Chrome, go to `http://LINUX_PLATFORMJS_Installation IP:PORT/MAXGAUGE/Config`. ( When executing PlatformJS in a Linux environment, to enter the address, you must type MAXGAUGE in all capital letters. )



2. Log onto the default account. (ID: admin / PW:manager)



3. Set the Instance, Account, Alert, SMS settings.




---

**Note. For more detailed instructions on MaxGauge Configuration, please reference "MaxGauge Configuration Manual".**

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**To find out more about  
MaxGauge or If you have  
interesting about this product,  
contact MaxGauge.**

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Torracne, CA 90502, USA**

### **ABOUT US**

MaxGauge, INC is a solution based technology company that has been providing database optimization and tuning services since 2001 with our software solution. We have served 450 clients across a wide range of industries including finance, manufacturing, government, healthcare, telecommunication, etc.